

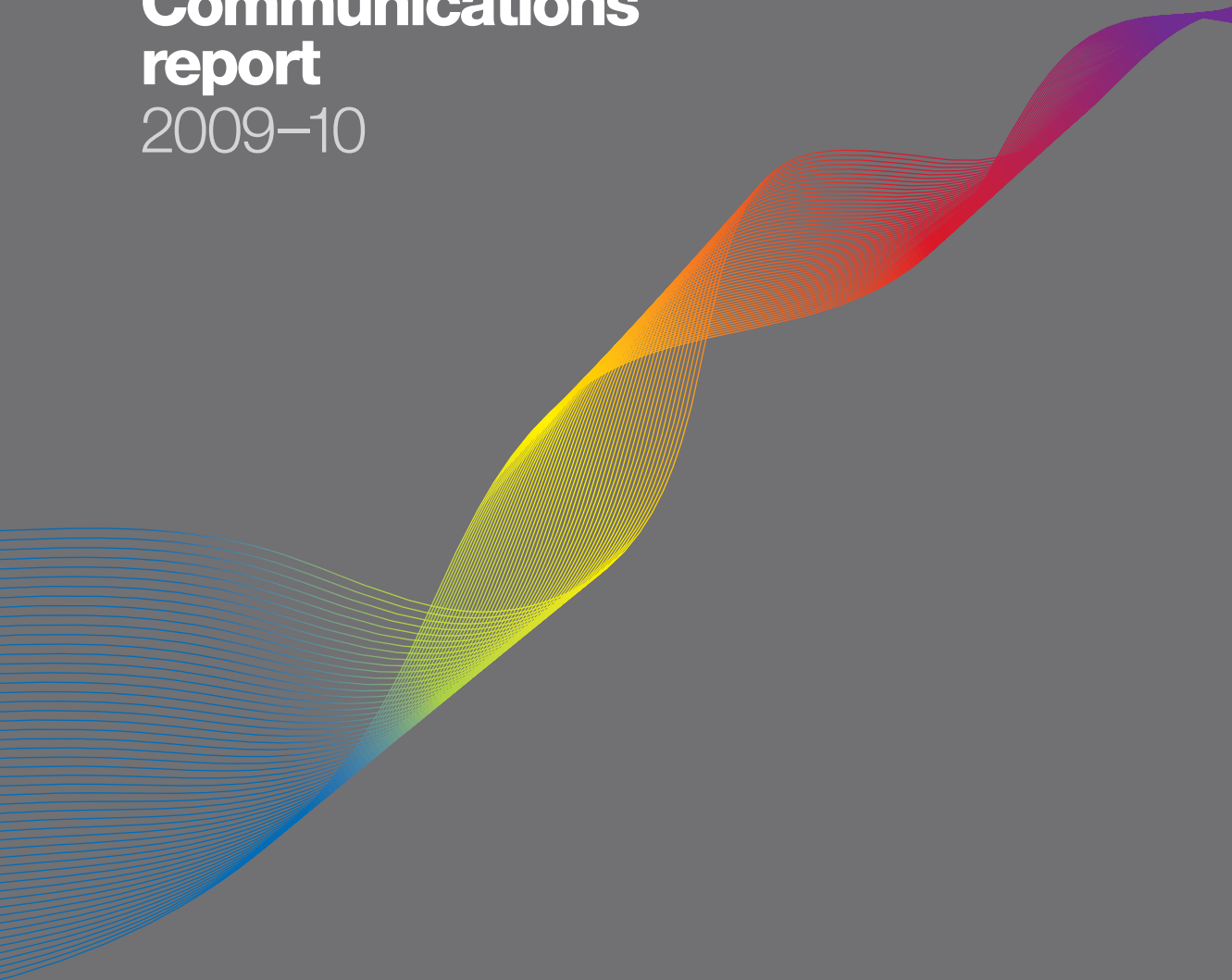


Australian Government



Australian
Communications
and Media Authority

Communications report 2009–10



communicating | facilitating | regulating

**Australian
Communications
and Media Authority**

**Communications
report**

2009–10



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3 November 2010

Senator the Hon. Stephen Conroy
Minister for Broadband, Communications and the Digital Economy
Parliament House
Canberra ACT 2600

Dear Minister

I am pleased to provide you with the *ACMA Communications report 2009–10*.

This publication incorporates a report on telecommunications performance for 2009–10, prepared in accordance with section 105 of the *Telecommunications Act 1997*.

The statutory reporting obligations under the *Telecommunications Act 1997* are fulfilled in the following chapters of the communications report:

- > 105(3)(a) and (b), which relate to the efficiency of supply of telecommunications services and the adequacy and quality of such services and billing information—Chapters 1, 3 and 5;
- > 105(3)(c) and (d), which relate to carrier and carriage service provider obligations under Part 6 of the *Telecommunications Act 1997* with respect to industry codes and standards—Chapter 3;
- > 105(3)(e) and (ea), and 105(4), which relate to industry performance in fulfilling universal service obligation and Customer Service Guarantee obligations—Chapter 3; and
- > 105(5A), which relates to national interest matters and cooperation with law enforcement agencies—Chapter 2.

Please note that subsection 105(7) of the *Telecommunications Act 1997* requires that you table the report in each House of the Parliament within 15 sitting days of that House after you have received the report.

Yours sincerely



Chris Chapman
Chairman

The ACMA *Communications report 2009–10* draws on data from a range of sources including the ACMA's own databases, information reported by industry, the ACMA's research using third-party public sources, and commissioned surveys and analysis.

The ACMA has a statutory reporting obligation to collect data from industry for monitoring and reporting purposes. However, as part of the Australian Government's regulation reform agenda, the ACMA will continue to work with industry participants to identify opportunities to streamline regulatory reporting arrangements.

Disclaimer

The information in this document was obtained from sources the ACMA believes to be reliable. However, the ACMA does not guarantee the accuracy, completeness or adequacy of the information. To the maximum extent permitted by law, the ACMA is not liable for any errors, omissions or inadequacy in the information, or for any reliance on the information. Predications and forward-looking statements in this document are based on information existing and known at the time of publication, and are subject to risks, uncertainties and changes in circumstances beyond the control of the ACMA. Opinions and positions stated in this document are subject to change without notice.

Comments

The ACMA welcomes feedback on the communications report. Comments and enquiries about the scope, content and format of the report should be sent to communications.report@acma.gov.au

Further information

For further information about the ACMA and links to the communications report, please go to www.acma.gov.au/communicationsreport.

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Chairman's foreword





Chris Chapman, Chairman

I am very pleased to present the *ACMA Communications report 2009–10*, the fifth edition to be published since the ACMA's establishment in July 2005.

This year's report provides further evidence of the increasing impact of convergence on communications and media services and the critical role that the telecommunication and broadcasting sectors play in transitioning Australia and Australians to a digital economy.

The communication and media industries in Australia continue to drive the development of the digital economy through the provision of critical digital infrastructure and services, and content. In response, consumers are accessing voice and content services across multiple digital platforms and devices.

The report also discusses telecommunications industry performance against a range of regulatory obligations, from compliance with the Customer Service Guarantee to the provision of emergency call services to Australians and performance in meeting industry codes and standards.

In this respect, the report fulfils the ACMA's statutory reporting requirements under section 105 of the *Telecommunications Act 1997* to report on matters relating to the performance of carriers and carriage service providers including consumer satisfaction, consumer benefits and quality of service.

Reflecting the ACMA's responsibilities in relation to broadcasting, broadcasting industry performance in meeting regulatory obligations (such as Australian content standards and media ownership) is also discussed.

The report is intended to provide high-level insight into industry performance. The ACMA has also undertaken more in-depth analysis where issues of concern arose. For example, the ACMA is currently undertaking a major public inquiry into customer service in telecommunications—the 'Reconnecting the Customer' inquiry—as well as a review of commercial radio standards related to advertising and disclosures of commercial interests.

The ACMA will also continue to publish a range of research to inform debate in the broader community and in line with the ACMA's commitment to evidence-based regulation. The ACMA makes its annual research program (*Research at the ACMA: research program overview 2010–11*) public on its website.

I commend the *ACMA Communications report 2009–10* to you as a pivotal part of our research agenda and an essential information base for analysing and understanding the changing communications and media sectors. In the spirit of constantly improving its evidence base, the ACMA (and I personally) would welcome any feedback on it.

Chris Chapman
Chairman

Executive summary



Legislative basis

The *ACMA Communications report 2009–10* fulfils the Australian Communications and Media Authority's (ACMA) statutory reporting requirements under the *Telecommunications Act 1997* (the Act). Section 105 of the Act requires the ACMA to report on the performance of carriers and carriage service providers (CSPs) with particular reference to consumer satisfaction, consumer benefits and quality of service.

Scope and structure

A number of changes have been made to the 2009–10 report.

To better utilise and to increase the exposure of this reporting program, the ACMA has developed a suite of targeted reports which complement the statutory report. These are aimed at the broader community and are designed to inform Australians about convergence and the digital economy and how they impact on communications and media services. The term 'digital economy' relates to the increasingly global network of economic and social activities that are enabled by digital information and communications technologies such as the internet, mobile and sensor networks.^{1,2} These reports include:

- > Report 1—*Australia in the digital economy: The shift to the online environment*
- > Report 2—*Take-up and use of voice services by Australian consumers*
- > Report 3—*Australian consumer satisfaction with communication services*
- > Report 4—*Changing business models in the Australian communication and media sectors: Challenges and response strategies.*

The ACMA has also changed its approach to the reporting of consumer benefits from communication services. In the 2009–10 report, the ACMA has undertaken a descriptive analysis of consumer benefits that draws on the wealth of data published in the above reports. The focus of this commentary centres on the benefits that consumers and citizens are deriving from participation in the digital economy.

Key trends

During 2009–10, the communications and media sectors in Australia continued to drive the development of the digital economy through the provision of critical digital infrastructure, which enabled the expansion of new service offerings to consumers and alternatives to traditional voice and media channels.³

Australian consumers have responded by increasingly accessing voice and content services across multiple platforms and are using a variety of digital technologies to better fulfil their communication and media needs. While consumers have more choice and flexibility in their communication services and media consumption, at the same time this development has implications for the sustainability of traditional business models and regulation in an increasingly IP-based communications and media environment.⁴

Continuing trends highlighted in this report provide further evidence of regulatory pressures arising from the convergence of networks and devices, particularly in relation to:

- > voice regulation, where continued growth in voice over internet protocol (VoIP) usage and the number of people identifying mobile phones as their main form of communication pose challenges in applying regulatory requirements that are based on traditional fixed-line voice services
- > supporting consumers making informed decisions in an environment of ongoing network, device and service innovation
- > content regulation in an environment where content is increasingly available on the internet and mobiles, as well as traditional broadcasting networks
- > regulating for the citizen in an internet protocol (IP)-based media and communications environment where usage of VoIP, mobile communications and the internet continues to grow, which in turn provides challenges for safeguards, such as access to the emergency call service and online security.

Ongoing challenge to traditional communication services

The status of traditional fixed-line telephone services in Australia continues to be challenged by increased mobile and VoIP service innovation, changing consumer preferences and patterns of communication usage.

With the rise in adoption of wireless technologies and alternative and complementary communication options such as 3G mobiles and VoIP, the number of fixed-line telephone services continues to decline. With a range of communications technologies available and increased consumer adoption of multiple complementary services, industry is offering a wider range of choice to consumers including voice, data and content services. The rise of wireless broadband is facilitating increased use of the internet and increasing levels of online participation.

During the 2009–10 reporting period, a number of trends have confirmed this underlying shift.

Decline in fixed-line telephone services

During 2009–10:

- > Fixed-line telephone services in operation declined from 10.67 million to 10.59 million.
- > On the basis of information reported to the ACMA, fixed-line telephone services operated by Telstra declined by four per cent, while Optus services increased by 12 per cent.
- > Telstra's Public Switch Telephone Network (PSTN) revenue declined by eight per cent.
- > Telstra's share of fixed-line telephone services market decreased from 85 per cent to 82 per cent.

Changing consumer behaviour

During 2009–10:

- > Use of VoIP at home increased by 16 per cent from 2.5 million to 2.9 million Australians aged 14 years and over.
- > The number of persons using a mobile phone for personal use increased from 14.6 million to 14.9 million Australians aged 14 years and over.
- > The number of Australians aged 14 years and over without a fixed-line telephone service at home increased by 35 per cent, from 1.7 million to 2.3 million.

At June 2010:

- > 63 per cent of Australians without a fixed-line telephone were aged 18–34 years.
- > 37 per cent of adult Australians (aged 18 years and over) with both a fixed-line and mobile telephone service identified their mobile telephone as their main form of communication, while 14 per cent use both equally.

Data driving growth in the mobile services market

During 2009–10:

- > Mobile services in operation (voice and data) increased from 24.22 million to 25.99 million.
- > The number of mobile services in operation includes 22.5 million mobile telephone services and 3.5 million mobile wireless broadband services at June 2010.⁵
- > Telstra reported a 5.9 per cent increase in mobile service revenue compared with 11 per cent for Optus.
- > 22.2 billion SMS messages were sent via mobiles in Australia.

Industry pushing alternative service offerings to customers

Industry is responding to the challenge of maintaining revenue streams and market position by shifting from a single service model to bundling a range of services to customers.

At June 2010:

- > 55 per cent of internet service providers (ISPs) in Australia offered customers a VoIP service, 52 per cent a home telephone and 34 per cent a mobile telephone service.
- > 30 per cent of ISPs offered naked DSL services.
- > Four per cent of ISPs in Australia offered an IPTV service to their customers.

At April 2010:

- > Bundled services had been adopted by 52 per cent of Australian household consumers with a fixed-line telephone.

Wireless broadband driving internet subscriber growth—Fixed-line dominating data

During 2009–10:

- > Internet subscribers increased by 14 per cent from 8.4 million to 9.6 million.
- > Broadband subscribers increased from 87 per cent to 92 per cent of all internet subscribers.
- > A continued shift to high speed internet services with the proportion of subscribers on services of eight megabits per second or more (maximum advertised speed) increasing from 26 per cent to 33 per cent.
- > Mobile wireless broadband (excluding handset) share of the internet subscriber market increased from 24 to 36 per cent.
- > DSL's share of the internet subscriber market declined from 50 per cent to 44 per cent.
- > Mobile wireless broadband subscriber numbers increased by 71 per cent compared to two per cent growth for DSL.

However, while wireless broadband accounted for the majority of the net increase in broadband subscriptions in Australia during 2009–10, fixed-line broadband networks continue to dominate data downloads, accounting for 91 per cent of the 155,503 terabytes of data downloaded during the June 2010 quarter.

At June 2010:

- > Of the 22.5 million mobile telephone services in operation in Australia, approximately 30 per cent also provided handset internet connections to customers.

National interest issues

The introduction of a recorded voice announcement (RVA) for the Triple Zero service on 19 December 2008 increased the efficiency of the emergency call service and reduced the number of non-emergency calls reaching the emergency call person (ECP). Telstra, the ECP, continues to perform above the regulated requirement for emergency call answering times while the quality of records on the Integrated Public Number Database (IPND), which underpins the emergency call service, has also improved.

During 2009–10:

- > The total volume of calls to the emergency service numbers Triple Zero (000) and 112 declined by 14 per cent, from 10.3 million to 8.8 million.
- > 96.7 per cent of all calls to Triple Zero and 112 were answered within five seconds and 99.0 per cent were answered within 10 seconds.
- > The proportion of calls transferred to emergency service organisations by the ECP increased from 52.0 per cent to 59.9 per cent, reflecting the reduction in non-emergency calls.
- > Disclosures of customer information by carriers and CSPs under Part 13 of the Act and the *Telecommunications (Interception and Access) Act 1979* increased from 818,190 to 870,301.
- > Cost to the carriers and CSPs of providing communication interception capabilities decreased by six per cent to \$15.7 million.
- > Connected records in the IPND increased from 53.7 million to 56.7 million.
- > The 2009–10 audit of the IPND revealed that 95.5 per cent of the address records on the IPND are regarded as having high or good usability in terms of the efficient dispatch of emergency response, up from 89.2 per cent recorded in the 2006 audit.

Telecommunications consumer safeguards and quality of service

In terms of regulated communication services, increased adoption of internet protocol and mobile based communications has also impacted the take-up of fixed-line standard telephone services covered by the Customer Service Guarantee Standard (CSG Standard). During the reporting period there has also been an improvement in CSP performance in meeting CSG Standard timeframes for new service connections and fault repairs.

During 2009–10:

- > The reported number of fixed-line telephone services covered by the CSG Standard decreased by 1.8 per cent to 7.36 million services.
- > Call minutes to the National Relay Service (NRS) decreased by 2.8 per cent, from 3.25 million to 3.16 million minutes. The internet's share of relay call minutes increased from 27.5 per cent to 36 per cent.
- > The number of local numbers ported decreased by 26 per cent, from 832,218 to 615,860.
- > The number of mobile numbers ported increased by 23 per cent, from 1.35 million to 1.66 million.
- > The numbers added to the Do Not Call Register (DNCR) increased by 42 per cent to 5.04 million.
- > The number of payphones in operation in Australia decreased by 11 per cent from 39,328 to 35,012.
- > On a quarterly basis, Telstra payphones were serviceable between 94 and 96 per cent of the time, at a national level.
- > 3,017 complaints were received concerning spam, compared to 3,947 complaints received during 2008–9.
- > The number of complaints received concerning unsolicited telemarketing calls increased from 10,644 to 11,229.
- > The number of complaints received concerning potential breaches of the *Do Not Call Register Act 2006* (DNCR Act) and/or the Telemarketing Industry Standard increased from 9,036 to 9,308.
- > The four main CSPs (AAPT, Optus, Primus and Telstra) connected between 89.4 per cent (AAPT) to 98.9 per cent (Primus) of new fixed-line services within the CSG Standard timeframes.
- > These main CSPs repaired between 93.4 per cent (Telstra) to 97.3 per cent (AAPT) of all faults for fixed-lines within CSG Standard timeframes.

- > Total complaints issues received by the Telecommunications Industry Ombudsman (TIO) increased by less than one per cent, from 481,418 to 485,471.
- > TIO complaint issues concerning:
 - mobile services increased by 18 per cent
 - internet services increased by seven per cent
 - fixed-line services declined by 11 per cent
 - mobile premium services (MPS) declined by 66 per cent.

Broadcasting industry performance in meeting regulatory obligations

The broadcasting sector in Australia has seen a continued transition to a digital broadcasting environment with new digital television and radio services being offered to audiences. This, in conjunction with application of new customer service delivery models such as catch-up television, is providing greater choice and flexibility for consumers of media services in Australia. Commercial television licensees continued to meet Australian content quotas. During the reporting period there has also been an increase in the number of commercial and subscription television broadcasting licences operating in Australia.

During 2009–10:

- > Commercial radio broadcasting licences remained at 273 (no change).
- > Commercial television broadcasting licences increased from 59 to 71.
- > Subscription television licences in operation increased from 2,591 to 2,700.
- > Community broadcasting licences (television and radio) increased from 496 to 537.
- > Telephone and written complaints and enquires regarding broadcasting matters received by the ACMA increased by 16 per cent to 1,676 written complaints and 385 telephone complaints.
- > Expenditure on online advertising by public and business organisations increased 12 per cent, from approximately \$1.7 billion to \$1.9 billion.
- > The ACMA received 3,212 complaints about online content, compared to 1,182 complaints received in 2008–09.
- > A total of 1,328 completed investigations resulted in the location of 1,932 individual items of prohibited/potentially prohibited online content.
- > New digital services commencing operation during the period included:
 - free-to-air television channels: Seven Network's 7TWO, the ABC's ABC3 and the Nine Network's GO!
 - digital radio transmissions: Austereo's *Radar Radio*, DMG's *Nova Nation* and Broadcast Operations' *Gorilla Radio*.

At 30 June 2010:

- > All required national and commercial digital television services had been rolled out in metropolitan areas of Australia, compared to 97 and 73 per cent respectively for regional areas and 54 and five per cent respectively for remote areas.
- > Seventy-four per cent of households had converted their main television to digital television, up from 53 per cent at June 2009.

During the 2009 calendar period:

- > The major metropolitan commercial network licenses (Seven Network, Nine Network and Network Ten) exceeded the minimum 55 per cent Australian transmission quota.
- > All free-to-air television stations broadcasted more than the required 80 per cent of Australian sourced advertising.

- > All of the commercial and national television broadcasters required to transmit the high definition television quota (the HDTV) complied.
- > The sale of airtime to advertisers accounted for nearly 93 per cent of total revenue generated by commercial television and 95 per cent for the radio broadcasting industry.

Endnotes

- 1 Sensor networks are a collection of wirelessly interconnected devices with sensing, computing and communication functionality streaming observational data to a central data aggregation point. See www.imos.org.au.
- 2 The Department of Broadband, Communications and the Digital Economy, *Australian's Digital Economy: Future Directions*, 14 July 2009.
- 3 The term digital economy covers the global network of economic and social activities that enable by information and communication technologies such as the internet, mobile and sensor networks.
- 4 The ACMA, *Corporate plan 2009–11*, October 2009.
- 5 Wireless broadband refers to where customers accessed a broadband service over the mobile network using a datacard or dongle connected to a desktop or portable computer.



Key indicators—At a glance¹

¹ All sources the ACMA, except where noted.

Licensed services

Broadcasting licences

Licence type	30 June 2009	30 June 2010
Commercial radio broadcasting licences	273	273
Community radio broadcasting licences	350	356
Temporary community radio broadcasting licences	65	100
Commercial television broadcasting licences	59	71
Community television broadcasting licences*	81	81
Subscription television broadcasting licences†	2,591	2,700

*Relates mostly to indigenous television services.

†Each subscription service is licensed separately.

Telecommunications licences

Licence type	30 June 2009	30 June 2010
Licensed carriers	175	177
Licensed or registered cablers	61,904	64,587

Apparatus licences

Licence type	30 June 2009	30 June 2010
Aeronautical	1,977	2,077
Aircraft	13	13
Amateur	15,432	15,626
Broadcasting	9,676	9,956
Defence	71	71
Earth	389	478
Fixed	42,302	42,607
Land mobile	63,660	64,882
Maritime coast	3,403	3,405
Maritime ship	8,594	8,359
Outpost	5,363	4,887
Public telecommunications service	13	13
Radiodetermination	2,330	2,630
Scientific	502	472
Space	60	73
Major coast receive	17	17
Earth receive	371	492
Fixed receive	1,014	1,015
Space receive	64	257
Total	155,251	157,330

Note: Figures include multi-year licences.

Financial information

Radiocommunications apparatus licences revenue

Type of licence	2008–09 \$million	2009–10 \$million
<i>Assigned licences</i>		
Public telecommunications service	68.0	69.0
Fixed	53.6	51.5
Land mobile	20.2	19.0
Satellite*	4.5	4.7
Defence	6.6	7.9
Other	2.3	3.1
Total assigned licences	155.2	155.2
<i>Non-assigned licences</i>	1.7	1.3
Total	156.9	156.5

*Includes earth, space, earth receive and space receive licences.

Revenue raised

	2008–09 \$million	2009–10 \$million
<i>Telephone number revenue</i>		
Revenue from smart numbers® auctions	3.2	3.1
Revenue from annual numbering charge	59.9	60.0
Broadcasting licence fees	341.0	241.4

Universal service obligation (USO) subsidy

The total 2009–10 USO subsidy was \$145 million.

Telecommunications revenue

	2005–06	2006–07	2007–08	2008–09	2009–10
Total eligible revenue of carriers	\$24.7 b	\$25.2 b	\$26.8 b	\$28.1 b	n/a
Revenue from carrier licence charges	\$55.4 m	\$33.7 m	\$37.1 m	\$36.2 m	\$39.5 m

Note: b=billion, m=million. 2009–10 not yet available.

Telecommunications services

Communication network and service providers*

Network/services	Coverage	Number of service providers or networks*
Fixed-line voice*	n/a	306 fixed-line telephone providers
VoIP*	n/a	204 VoIP providers
Mobile network operators		
GSM	96.22% of population	Three carrier networks
3G	99.09% of population	Three carrier networks
Broadband		
Internet access*	n/a	529 internet service providers
HFC cable	Telstra's HFC network passes 2.7 million premises Optus' HFC network passes 1.4 million premises	Three carriers with metropolitan and regional centre networks (Telstra, Optus, Neighbourhood Cable)
ADSL	n/a	444 providers
ADSL2+	n/a	177 providers
Fixed-wireless	n/a	164 providers
Mobile wireless	n/a	161 providers
Satellite	100% of population	35 providers

Note: includes resellers. CSP and ISP can provide multiple services. Coverage data for Neighbourhood cable HFC network not available.

*Market Clarity Database, June 2010.

Number of services

	June 2009	June 2010	% change
Mobile services (voice and data)	24.22 m	25.99 m	7%
Mobile telephone services	22.2 m	22.5 m	1%
Mobile wireless broadband (dongle/datacard services)*	2.02 m	3.46 m	71%
Mobile handsets allowing internet connection*	n/a	6.8 m	n/a
Payphones (Telstra-operated and privately owned)	39,328	35,012	-11%
Fixed-line telephone services†	10.67 m	10.59 m	-1%
Number of telephone services covered by the CSG Standard	7.49 m	7.36 m	-2%
Home VoIP users‡	2.5 m	2.9 m	16%
Internet services (subscribers) *§	8.4 m	9.6 m	14%
DSL	4.17 m	4.25 m	2%
Cable and fibre	931,000	936,000	1%
Satellite	90,000	113,000	26%
Dial-up	1.09 m	801,000	-27%

* Source: ABS.

† Includes PSTN and other fixed.

‡ Roy Morgan Single Source: estimate relates to number of VoIP users aged 14 years and over.

§ Includes mobile wireless dongle/datacard services. Excludes mobile handset internet services. m=million.

Volume of data downloaded (terabytes)

Network	Quarter ending June 2009	Quarter ending June 2010	% change
Dial-up	n/a	280	n/a
Fixed-line broadband *	n/a	141,892	n/a
Wireless broadband†	n/a	13,330	n/a
Mobile handset internet	n/a	717	n/a
Total volume of data downloaded‡	99,249	155,503	57%

n/a: not available.

*DSL, cable, fibre and other wired broadband services.

† Includes satellite, fixed wireless, mobile wireless via a datacard, dongle or USB modem and other wireless broadband. Excludes subscriptions via mobile handsets.

‡ Excludes downloads via mobile handsets.

Source: ABS.

Number portability

	2008–09	2009–10	% change
Local geographic numbers ported	832,218	615,860	–26%
Mobile numbers ported	1.35 m	1.66 m	23%

m=million.

National Relay Service

	2008–09	2009–10	% change
Volume of call minutes (outbound)	3.25 m	3.16 m	–3%

m=million.

Quantity of numbers allocated by number type

Type of number	CSPs allocated numbers		Quantity of numbers allocated	
	2008–09	2009–10	2008–09	2009–10
Geographic	14	9	3,132,400	1,478,900
Digital mobile	4	8	2,420,000	5,610,000
Mobile number codes	1	3	1	3
International signalling point codes	3	5	8	8
Data network access service	n/a	1	n/a	6,000
Pre-select code	n/a	3	n/a	3
Operator service	1	n/a	1	n/a
Total numbers allocated			5,552,410	7,094,914

Emergency call services

Call volumes to emergency call service numbers Triple Zero and 112

	2005–06	2006–07	2007–08	2008–09	2009–10
Total number of calls offered	11,588,777	12,139,526	12,220,196	10,301,011	8,833,683
Total number of calls answered	10,625,171	11,059,705	11,094,006	9,587,336	8,426,111

Telecommunication and broadcasting service complaints and investigations

Number of telecommunication complaint issues received by the TIO

Year	Mobile phone	Fixed-line telephone	Internet	Mobile premium services	Total
2008–09	178,019	159,153	115,437	28,809	481,418
2009–10	209,715	142,167	123,669	9,920	485,471

Source: TIO.

Telemarketing investigations

	Complaints received	Complaints raising potential breaches of the Do Not Call Register Act/ Telemarketing Industry Standard
2008–09	10,644	9,036
2009–10	11,229	9,308

Spam complaints

Year	Number of complaints concerning spam
2008–09	3,947
2009–10	3,017

Number of broadcasting complaints and investigations*

Year	2005–06	2006–07	2007–08	2008–09	2009–10
Telephone enquiries and complaints	578	444	429	308	385
Written enquiries and complaints	737	886	789	1,464	1,676
Investigations completed	142	136	136	194	189
Investigations resulting in breach finding*	34	45	47	80	74
Investigations resulting in non-breach finding*	108	91	89	109	111

*Investigations against a code of practice, licence condition, standard and/or provision of the Broadcasting Services Act 1992.

Sum of categories does not equal total number of investigations completed due to exclusion of completed investigations with no finding, for example where the complaint is withdrawn.

Internet content investigations

	2005–06	2006–07	2007–08	2008–09	2009–10
Complaints received	826	602	1,122	1,182	3,212
Investigations leading to finding of prohibited content	422	262	475	618	1,328
Items actioned (hosted in Australia)	18	5	15	7	25
Items actioned (overseas-hosted)	706	494	786	1,356	1,907



Chapter 1

The Australian communications and media market

Overview

Chapter 1 provides an overview of the communications and media market in Australia, including discussion of the provision and availability of services, changing consumer patterns of service usage and carrier licensing and numbering allocation. This chapter also includes a summary of media ownership in Australia, changing patterns of advertising expenditure and a discussion of the main challenges to traditional services as a result of convergence and changing consumer preferences.

Key developments in 2009–10 include:

- > continuing decline in the number of fixed-line voice services with increasing numbers of people without a fixed-line telephone
- > data services driving growth in mobile service numbers
- > continued growth in use of voice over internet protocol (VoIP)
- > mobile wireless broadband facilitating growth in the internet subscriber numbers
- > industry adopting service bundling to retain customers
- > increasing service developments relating to IPTV and video on demand
- > increase in the number of subscription television licences
- > increasing expenditure on online advertising in response to the growth in online participation.

Chapter summary

During the 2009–10 reporting period, the communications and media sectors in Australia continued to provide critical infrastructure and services to support the development of the digital economy.

Two of the key developments during this time has been the commencement of rollout trials for the National Broadband Network (NBN), and the continued rollout of wireless broadband networks, which has enabled the expansion of new mobile service offerings to consumers and alternatives to traditional communications.

Changes in communication consumption patterns continued to challenge incumbent communication players during the 2009–10 reporting period. Australians are now increasingly opting for alternative digital technologies to fulfil their communication needs.

The main challenge to fixed-line revenues continues to come from mobile and VoIP-based communications. At June 2010, 2.9 million Australians aged 14 years and over were estimated to use a VoIP service at home, compared to 2.5 million at June 2009—a 16 per cent increase during 2009–10.

The total number of mobile services—both voice and data—in operation in Australia reached 25.99 million at June 2010. This included 22.5 million mobile telephone services and 3.5 million mobile wireless broadband services where customers accessed a broadband service over the mobile network using devices such as a datacard or dongle connected to a desktop or portable computer. Of the 22.5 million mobile telephone services in operation in Australia at June 2010, 6.8 million, or 30 per cent, allowed internet connectivity. Both Telstra and Optus continued to pursue mobile data and voice developments, with both carriers recording significant growth in mobile revenue. While Optus has generated most of its revenue from mobile services for some time, Telstra's mobile revenue has exceeded its Public Switched Telephone Network (PSTN) revenue for the second consecutive reporting period.

The continued growth in alternative means of voice and data communications saw a significant increase in the number of Australians abandoning traditional fixed-line voice communications during 2009–10, reflecting changing lifestyle needs and cost factors. At June 2010, approximately 2.3 million Australians aged 14 years and over did not have a fixed-line telephone at home compared to 1.7 million at June 2009. This represented a 35 per cent increase over the 2009–10 reporting period.

Young adults continued to drive fixed-line telephone disconnections, with 63 per cent of Australians without a fixed-line telephone in their home 18–34 years. At present, 37 per cent of adult Australians (18 years and over) with both a fixed-line telephone service at home and a mobile telephone identified their mobile as their main communication device. This group can be considered a potential 'feeder' group in terms of any future decreases in the number of fixed-line telephone connections.

The shift away from traditional fixed-line communications continues to be a major challenge to incumbent fixed-line voice provider, Telstra. During 2009–10, Telstra reported an eight per cent, or \$504 million, decline in PSTN revenue and its share of the fixed-line telephone services in operation declined to 82 per cent at June 2010, compared to 85 per cent at June 2009.

At June 2010, there were 10.59 million fixed-line telephone services in operation in Australia, compared with 10.67 million reported at June 2009. Telstra reported a four per cent decline in its fixed-line telephone services compared to Optus' reported 12 per cent increase in fixed-line telephone services during 2009–10.

More Australians went online during 2009–10, with the number of internet subscribers reaching 9.6 million at June 2010, up from 8.4 million at June 2009—a 14 per cent increase over the reporting period. Broadband subscribers accounted for 92 per cent of all internet subscribers at June 2010, compared to 87 per cent at June 2009.

Mobile wireless broadband, excluding handheld broadband, has driven net growth in the total number of mobile and broadband services. Mobile wireless broadband's share of the internet subscriber market in Australia increased to 36 per cent at June 2010, compared to just over 24 per cent at June 2009. The market share of long established DSL services declined to 44 per cent of the total number of internet of subscribers at June 2010, down from nearly

50 per cent at June 2009. During this period, the number of new wireless broadband subscribers increased by 71 per cent compared to less than two per cent increase for DSL services. However, while wireless broadband accounted for the majority of the net increase in broadband subscriptions in Australia during 2009–10, fixed-line broadband networks continue to dominate data downloads, accounting for 91 per cent of the 155,503 terabytes of data downloaded during the June 2010 quarter.

In response to the growth of broadband internet subscribers, Australian internet service providers (ISPs) have continued to expand into other services, such as mobile and VoIP communications, and the provision of content services, such as IPTV and internet video. As a result, 55 per cent of ISPs in Australia now offer a VoIP service, 34 per cent a mobile service, and four per cent an IPTV service, to their customers.

The broadcasting sector experienced a net increase in broadcasting licences during 2009–10, with 344 commercial (television and radio) broadcasting, 2,700 subscription television and 537 community radio and television licences in operation at June 2010. This compared to 332 commercial broadcasting, 2,591 subscription television and 496 community broadcasting licences active at June 2009.

Growing levels of online participation and media consumption has seen a continued shift towards the development of online advertising channels. During the 2009 calendar period, approximately \$1.9 billion was spent on online advertising by private and public organisations in Australia, compared to \$1.7 billion in 2008. This represents an increase of 17 per cent over the 12 months to 30 June 2010.

Table 1.1 Key industry and consumer statistics

	2008–09	2009–10
Standard fixed-line telephone services in operation*	10.67 m	10.59 m
Home VoIP users*	2.5 m	2.9 m
People without a home fixed-line telephone service*	1.7 m	2.3 m
People who are main users of a mobile telephone for personal use*	14.6 m	14.9 m
Mobile data and voice services in operation*	24.2 m	25.99 m
Mobile telephone services in operation*	22.2 m	22.5 m
Mobile wireless broadband services*†	2 m	3.5 m
Number of internet subscribers*	8.4 m	9.6 m
% of population covered by GSM mobile networks*	96.22%	96.22%
% of population covered by 3G mobile networks*	99.06%	99.09%
Volume of data downloaded from the internet (June quarter)	99,249 terabytes	155,503 terabytes
Licensed carriers*	175	177
Geographic number allocations	3.13 m	1.48 m
Community radio broadcasting licensees*	350	356
Community television broadcasting licensees*	81	81
Pay TV subscribers (households)*	2.30 m	2.38 m

*At 30 June.

†Refers to services offered via a datacard or dongle. Excludes hand-held mobile broadband.

m=million.

Communication service availability

Fixed-line voice service availability

There were 306 fixed-line telephone service providers operating in Australia at June 2010.¹ Of the total number of fixed-line telephone service providers, 191 were offering services over the PSTN

and 204 were operating in the VoIP market, including service providers and resellers. Eighty-nine providers were offering both PSTN and VoIP services to customers.

Fixed-line services in operation

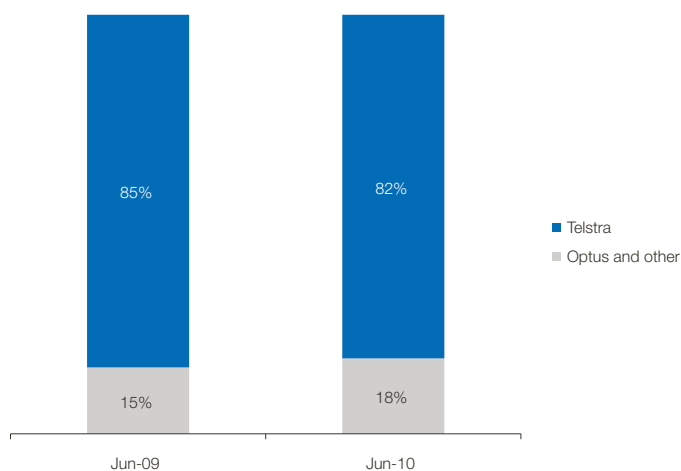
The ACMA estimates that there were approximately 10.59 million standard fixed-line telephone services in operation in Australia at June 2010, compared with 10.67 million at June 2009 and 11.0 million at June 2008 (Table 1.2). The decrease in fixed-line telephone services during 2009–10 was approximately one per cent overall, compared to the three per cent decline recorded during the 2008–09 reporting period. Consistent with 2008–09, the decline in retail and wholesale services continued during 2009–10, with numbers declining by less than one per cent and approximately two per cent respectively.

Telstra recorded declines in all of its fixed-line telephone service market segments during 2009–10 (Table 1.2), with the residential (retail) services declining by nearly five per cent, business (retail) services declining by three per cent and wholesale services by three per cent. In comparison, Optus reported a 12 per cent increase in its fixed-line telephone services.

The decline in this segment of the voice service market during 2009–10 is further demonstrated by Telstra recording an eight per cent or \$504 million fall in its PSTN revenue.² A comparison of Telstra's source of product revenue over the last two financial years is provided in Figure 1.2. Consistent with general market trends in Australia, Telstra's revenue from mobile networks continued to increase, while traditional fixed-line revenues (e.g. PSTN) have either recorded little or no growth. Optus has further reinforced the strong performance of mobile services with an 11 per cent year-on-year growth in its mobile revenue.³

Figure 1.1 provides an overview of the market share of the fixed-line telephone service market in Australia at June 2010. On the basis of reported figures, Telstra's share of the number of fixed-line telephone services in operation declined to 82 per cent at June 2010 from 85 per cent at June 2009.

Figure 1.1 Fixed-line telephone service market share, Australia

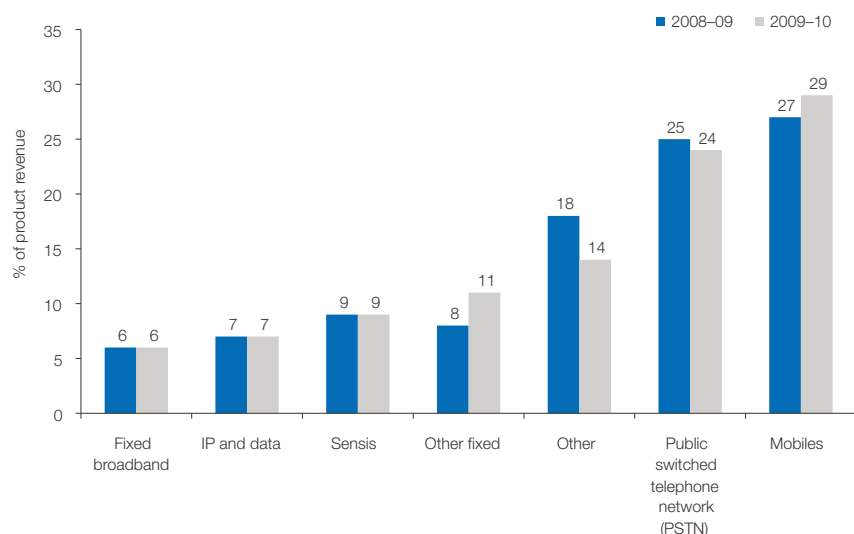


Source: The ACMA annual industry data request.

The decline in fixed-line services also reflects changing consumer communication preferences, as evident in the shift to other technologies such as VoIP and wireless communications (Figure 1.3).

At June 2010, approximately 2.9 million Australians aged 14 years and over were estimated to use some form of VoIP service at home compared to 2.5 million at June 2009, an increase of 16 per cent.

Figure 1.2 Composition of Telstra's product revenue, by financial year



Source: Telstra, Full Year 2009–10 Financial Results—CEO/CFO analyst briefing presentation, 12 August 2010.

Table 1.2 Number of standard fixed-line telephone services in operation (million)

All carriage service providers	Jun-07	Jun-08	Jun-09	Jun-10	% change Jun-09 to Jun-10
Retail (own network)	8.69 m	9.40 m	9.17 m	9.12 m	–0.5%
Wholesale	2.23 m	1.60 m	1.50 m	1.47 m	–2.0%
Total	10.92 m	11.00 m	10.67 m	10.59 m	–0.7%

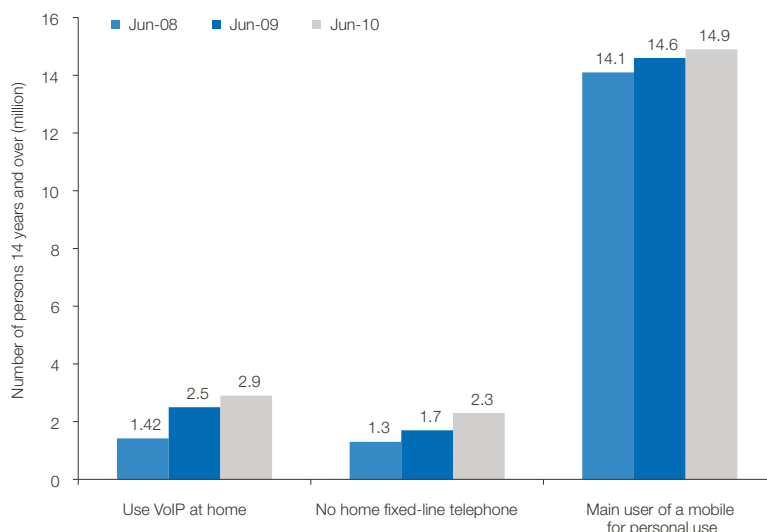
Telstra services only	Jun-07	Jun-08	Jun-09	Jun-10	% change Jun-09 to Jun-10
Residential (retail)	5.53 m	5.56 m	5.46 m	5.20 m	–4.8%
Business (retail)	2.25 m	2.31 m	2.27 m	2.21 m	–3.1%
Wholesale	1.98 m	1.50 m	1.29 m	1.25 m	–3.1%
Total	9.76 m	9.36 m	9.02 m	8.66 m	–4.0%

Source: The ACMA annual industry data request.

In addition, 37 per cent of Australians with a mobile and a fixed-line telephone used their mobile as their main communication service, while a further 14 per cent were estimated to use their mobile and fixed-line telephone equally.⁴ At the same time, an estimated 2.3 million Australians did not have a fixed-line telephone at home compared to 1.7 million at June 2009, an increase of 35 per cent. This group was dominated by 18–34 year olds who accounted for 63 per cent of persons estimated not to have a fixed-line telephone service at home at June 2010.⁵

ACMA-commissioned research also shows that an estimated 12 per cent of Australian adult consumers (persons aged 18 years and over) are considering removing their traditional fixed-line telephone in favour of other voice communications services, such as VoIP and mobile telephony, in the next 12 months.⁶ While it is unlikely the majority of these people will follow through on intentions to disconnect their home fixed-line telephone service over the next 12 months, this sentiment is indicative of changing attitudes and behaviours towards traditional voice communications in light of communication technologies which are comparable or better in terms of cost, reliability and flexibility.

Figure 1.3 Take-up of select communication technologies



Source: Roy Morgan Single Source, June 2010.

ACMA research into consumer satisfaction levels has also identified cost as a dominant driver in a consumer's decision to disconnect their home fixed-line telephone service. Currently there is a relatively high level of dissatisfaction with fixed-line rental costs, a factor which is foremost in the minds of those fixed-line telephone users considering abandoning their home fixed-line service for other alternative communications over the next 12 months. At April 2010, 33 per cent of household fixed-line consumers aged 18 years and over were estimated to be either dissatisfied or very dissatisfied with line rental costs, while household consumers considering disconnecting their fixed-line telephone service identified the potential to save money (56 per cent) and line rental costs (eight per cent) as the main reason for considering removing their home fixed-line telephone service.⁷

Further analysis of household consumer and small and medium enterprise (SME) satisfaction levels with communication services is published in the ACMA's 2009–10 Communications report series, *Report 3—Australian consumer satisfaction with communication services*.

The trend away from residential fixed-line telephone services has also been driven by supply-side factors. For example, ISPs are increasingly offering cheaper alternatives to their customers, such as bundling a VoIP or mobile service with their home internet service,⁸ while mobile carriers continued to build customer service offerings through their mobile network infrastructure, targeting 'high-value' smartphone users.⁹

Telstra has recently sought to address the continuing decline in its PSTN revenue base through a number of initiatives. In April 2010, the company launched a household multimedia initiative, the T-Hub, a convergence device that offers triple play services (voice, data and video) and incorporates a wireless handset and PSTN calling service, with touchscreen functionality and internet access.

Telstra reports that users of T-Hub can send text messages, go online, play music, listen to radio stations and access other Telstra offerings, such as directory services, in addition to making voice calls.¹⁰ Telstra has also offered additional data allowances to those customers retaining their Telstra fixed-line telephone service.¹¹

Further analysis of consumer attitudes and use of communication services is published in the ACMA's 2009–10 Communications report series, *Report 2—Take-up and use of voice services by Australian consumers*.

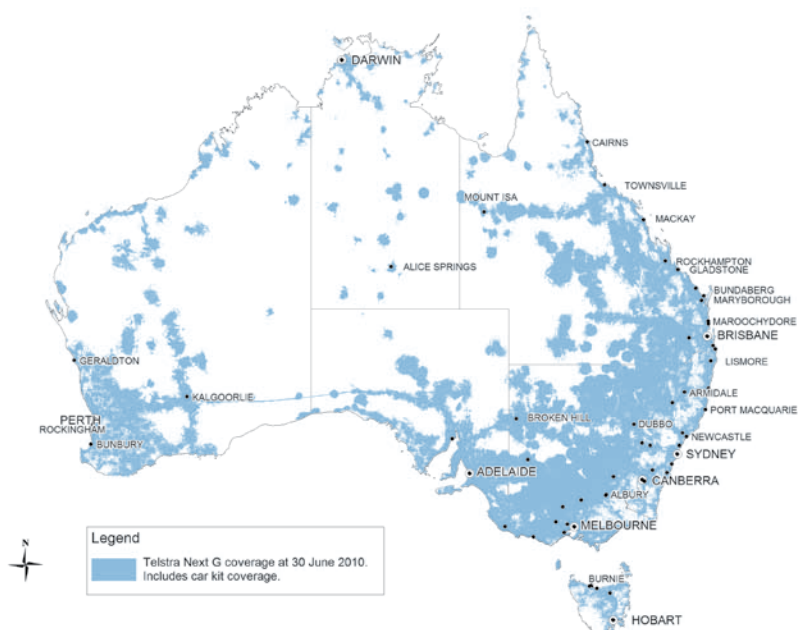
Mobile service availability

There are three mobile network operators in Australia: Telstra, Optus and Vodafone Hutchison Australia (VHA). VHA resulted from the merger of Vodafone and Hutchison during 2009–10. VHA operates the brands Vodafone and 3.

All three mobile network carriers operate both a global system for mobile (GSM or 2G) and a wideband code division multiple access (W-CDMA or 3G) network. 3G networks provide access to both voice and data services, including mobile broadband, and send and receive data more quickly than 2G networks. The data capacity of mobile networks is discussed in the internet section of this chapter.

Figures 1.4 and 1.5 depict the coverage of 3G mobile networks for Telstra, Optus and VHA. At June 2010, GSM networks provided coverage to 96.22 per cent of the population, a figure that remains unchanged since June 2009. 3G networks, providing access to voice and data services including wireless broadband, covered 99.09 per cent of the population, up from 99.06 per cent reported at June 2009.

Figure 1.4 Telstra 3G network coverage, June 2010



Source: Telstra.

Recent upgrades have seen VHA and Optus extend their 3G network coverage to 94 per cent¹² and 97 per cent¹³ of the Australian population respectively. Optus reported that upgrades are continuing, with the goal of increasing its coverage to 98 per cent.¹⁴

Figure 1.4 shows the coverage of the Optus and VHA 3G networks at June 2010. Areas of increased coverage include south-west Western Australia, the Eyre Peninsula in South Australia, Broken Hill, Mount Isa and inland of Mackay in Queensland.

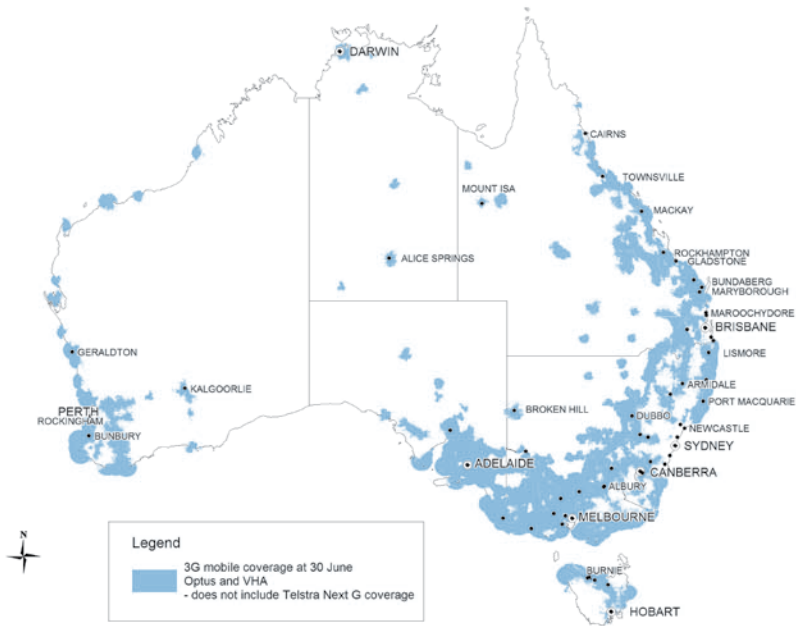
Number of mobile services in operation

At June 2010, there were approximately 25.99 million mobile voice and data services in operation in Australia. In addition, the ABS reported that there were approximately 3.5 million mobile wireless broadband subscribers at June 2010 compared to two million at June 2009.¹⁵

The number of mobile voice services in operation at June 2010 was estimated to be in the vicinity of 22.5 million, compared to approximately 22.2 million mobile voice services at June 2009. The

increase in the total number of mobile services in Australia has been driven by the transition to 3G and the increasing provision of mobile broadband services.

Figure 1.5 Optus and VHA 3G network coverage

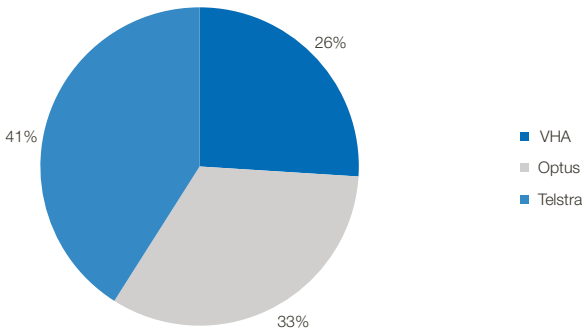


Source: Optus and VHA.

The ABS figures reflect the increasing importance of mobile broadband services to the growth of the mobile sector in Australia, with the number of mobile wireless broadband services increasing by 71 per cent in the 12 months to June 2010 compared to a net increase of just over one per cent for the total number of mobile voice services.¹⁶ Further analysis of the mobile broadband subscriber market in Australia is provided in the internet section of this chapter.

The market share of the three mobile carriers, presented in Figure 1.6, shows that Telstra held approximately 41 per cent of the mobile service market, Optus approximately 33 per cent and VHA approximately 26 per cent at June 2010.

Figure 1.6 Market share of mobile services in operation, June 2010



Note: Includes mobile broadband subscribers.
Source: The ACMA annual industry data request.

Table 1.3 shows the number of pre-paid and post-paid mobile services in operation at June 2010. At June 2010, there were approximately 15.3 million post-paid mobile services in operation—where the customer receives a bill on a regular basis.¹⁷ Post-paid services accounted for 59 per cent of the total number of mobile services.

Table 1.3 Number of mobile services in Australia (million)

Mobile service	June 2009	June 2010
Pre-paid	10.58 m	10.71 m
Post-paid	12.86 m	15.28 m
Total	23.44 m	25.99 m

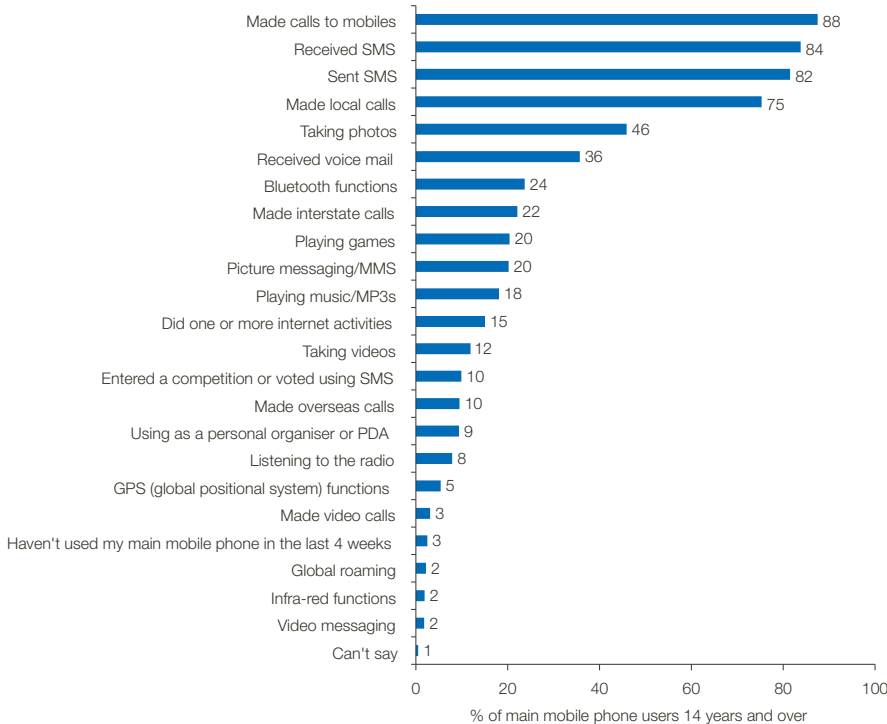
**2008–09 does not include wholesale services.
 Note: Pre-paid and post-paid figures include wholesale and retail services and wireless broadband data services provided via data cards or dongles. Data not directly comparable to previous years due to better discrimination of mobile broadband services.
 m=million.
 Source: The ACMA annual industry data request.*

Activities undertaken via mobile telephones

The increasing capacity of mobile networks and functionality of mobile devices to handle triple play services (voice, data and video) has seen an expansion in the range of non-voice activities undertaken via mobiles telephones (Figure 1.7). This has also occurred in direct response to industry incentives to customers to increase their use of mobile data services.

These incentives have typically encompassed more generous data caps, providing access to paid content services on handsets via ‘walled gardens’, and by providing broadband internet access directly to mobile telephone handsets.¹⁸ The ABS reports that at June 2010, there were 6.8 million mobile telephone handsets with internet connectivity in addition to the 3.5 million mobile wireless broadband connections via dongles or datacards connected to a workstation or portable computer.¹⁹

Figure 1.7 Activities undertaken via mobile telephones, June 2010



Source: Roy Morgan Single Source, June 2010.

Handset applications and mobile broadband are increasingly important revenue generators for mobile carriers. Despite this, voice, short message services (SMS) and multimedia message services (MMS)-based activities continued to dominate the mobile telephony and data market in Australia.²⁰ During the 2009–10 reporting period alone, approximately 22.2 billion SMS messages were sent via mobiles in Australia.²¹

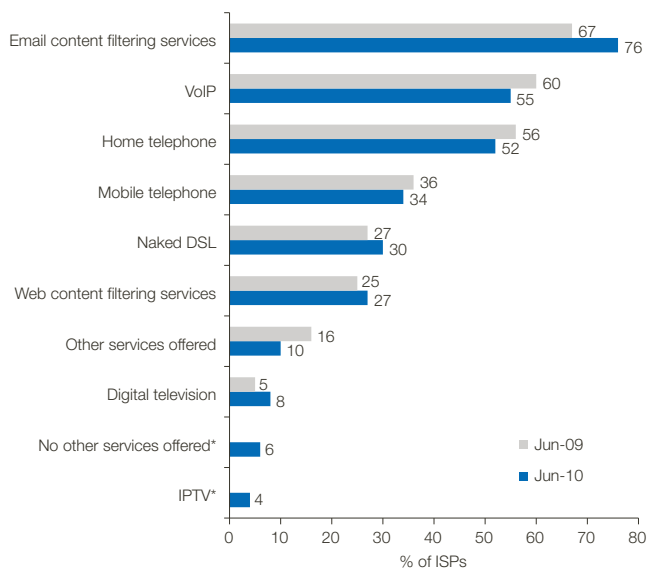
Internet service availability

Market Clarity data shows there were approximately 529 internet service providers (ISPs) operating in Australia at June 2010.²² The decline in ISP numbers in recent years, according to some industry commentators, is the result of industry consolidation arising from mergers and acquisitions and small players exiting the market due to tight profit margins for those relying on wholesale DSL access.²³ Australian ISPs were operating in the following areas of the internet access market during 2009–10:²⁴ ADSL—444 providers, ADSL2+—177 providers, fixed-wireless broadband—164 providers, mobile wireless broadband—161 providers, satellite—35 providers.

However, network and service convergence, combined with ongoing competition and high levels of internet adoption in Australia, has driven change in the ISP sector. This is most evident in the shift from a single service provider model, centred on the provision of internet access alone, to one where a range of voice, data and content services are offered to customers. Usually this is offered through some form of bundling arrangement targeted to reduce subscriber churn²⁵ and differentiate service offerings from competitors.²⁶ According to ACMA research, approximately 52 per cent of adult communication consumers were estimated to have bundled their communication services, with fixed-line telephone (95 per cent), internet (84 per cent) and mobile telephone (48 per cent) the most common services bundled.²⁷

Figure 1.8 provides an overview of additional ISP service offerings at June 2009 and June 2010. On the basis of ABS data, at June 2010, the typical array of ISP service offerings, in addition to internet access, included provision of voice services (55 per cent offering VoIP, 52 per cent a home telephone and 34 per cent a mobile phone services), web and email filtering services (27 per cent and 76 per cent respectively) and sometimes content services in the form of IPTV (four per cent).

Figure 1.8 Additional ISP service offering, Australia



*June 2009 data not available.

Source: ABS, 8153.0-Internet Activity, Australia, June 2010.

While potential high value (in terms of financial return) services such as IPTV are still in their infancy in Australia, developments during the 2009–10 reporting period indicate that these services are being given serious consideration by major ISPs as an avenue to increase returns from their existing broadband subscriber base.

In June 2010, the ACMA published a study entitled *IPTV and internet video delivery models: Video content services over IP in Australia*, which outlined developments in Australia in the area of IPTV and internet video service delivery. While this study noted that during 2009–10, ISP content services in Australia were mostly restricted to offering unmetered downloads, there were a number of concrete developments relating to the provision of IPTV-like services to Australians. These included iiNet's commencement of a trial of the Fetch TV–IPTV service in April 2010, followed by the service launch in July 2010,²⁸ and Ericsson Australia Pty Ltd opening a new facility in Melbourne to act as a centre for IPTV, broadband television and mobile television development.²⁹ Table 1.4 outlines selected IP content offerings by Australian ISPs during 2009–10.

Table 1.4 Selected IP content service offerings by Australian ISPs, June 2010

Company	Primary service	Service	Content	Revenue model
Telstra	Voice, mobile, internet service provider	BigPond Movies/ TV website and T-box set-top box	TV and film content of local and international origin. Mix of recent and archive content. T-box will consist of a personal video recorder providing access to FTA television, seven BigPond TV channels including sport, news and music, and a library of on-demand movies.	Pay per view (PPV)
iiNet	Internet service provider	Partnership with Fetch TV service trials commenced April 2010	Partnering with content aggregator Fetch TV. Trials commenced April 2010, with the service launched in July 2010 offering a mix of on-demand content and subscription channels. ²⁹	Subscription and PPV
TPG	Internet service provider	IPTV to the computer	Small selection of content channels, mainly foreign language.	No charge
TransACT	Voice, internet service provider	IPTV to the TV	Pay TV channels and on-demand content.	Subscription and PPV for on-demand content

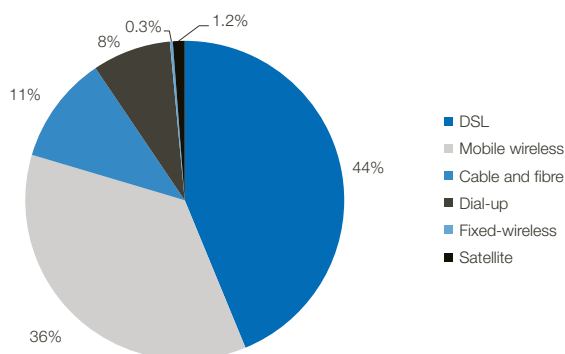
Source: ACMA, *IPTV and internet video delivery models: Video content services over IP in Australia*, June 2010.

Broadband internet

High speed internet services are underpinning the development of the digital economy in Australia allowing a growing range of information and services to be offered to Australian consumers and citizens. Increasing numbers of Australians are connecting to the internet; according to the ABS, there were 9.6 million internet subscribers in Australia at June 2010, compared with 8.4 million at June 2009, representing a 14 per cent increase over the reporting period. Broadband subscribers accounted for approximately 92 per cent of all internet subscribers in Australia at June 2010 compared to 87 per cent at June 2009, with dial-up now accounting for eight per cent of internet connections.³⁰ Further in-depth analysis of the developing digital economy in Australia is published in the ACMA's 2009–10 Communications report series, *Report 1–Australia in the digital economy: The shift to the online environment*.

Internet access technologies in Australia include digital subscriber line (DSL), hybrid fibre coaxial (HFC) cable, wireless broadband, fibre to the curb (FTTC), fibre to the premises (FTTP), satellite and optical fibre. DSL utilises the existing copper-based access network. HFC cable is a separate network combining a fibre backbone and high-speed coaxial cable providing the connection from the node to the premises. FTTC networks extend the speed and capacity of fibre to an area closer to the consumer using existing copper wires to complete the physical connection to the customer's premises.³¹ The focus is now shifting to FTTP, given the proposed creation of the NBN, which proposes an Australia-wide FTTP wholesale access network extending fibre to at least 90 per cent of premises in Australia. Figure 1.9 shows the market share of each access technology.

Figure 1.9 Distribution of internet subscribers by access technology, Australia, June 2010



Source: ABS, 8153.0-Internet Activity, Australia, June 2010.

Digital subscriber line

ABS data shows that DSL remains the most common internet access technology in Australia, accounting for 44 per cent of Australian internet subscribers at June 2010. However, its percentage share of the internet subscriber market in Australia has decreased, down from 50 per cent in June 2009 and 54 per cent in June 2008. At the same time, mobile wireless broadband (services offered via a datacard or dongle) has grown rapidly, increasing from 24 per cent in June 2009 to 36 per cent of the total number of internet subscribers at June 2010.³²

According to the ACCC, approximately 65 per cent of DSL services in operation at June 2010 were provided by Telstra through a retail or wholesale arrangement, with the remainder provided by other ISPs using unbundled lines.³³

An unbundled service is either:

- > an unconditioned local loop service (ULLS), whereby an ISP installs its own digital subscriber line access multiplexer (DSLAM) equipment in Telstra's local exchange building and rents the copper wire to the end-user's premises
- > a line-sharing service (LSS), whereby the ISP and Telstra share the line, with the ISP providing DSL broadband services using a different portion of the copper pair to that used by Telstra to provide voice services.

There has been strong growth in the number of services offered by providers using unbundled lines, reflecting the growth of competition in the provision of broadband services. Despite this, the number of Telstra DSL services (retail and wholesale) has continued to fall (Table 1.5). At June 2010 there were approximately 1.5 million unbundled lines, an increase of 23 per cent since June 2009.

Table 1.5 DSL services in operation

	Quarter ending				
	Jun-09	Sept-09	Dec-09	Mar-10	Jun-10
Telstra wholesale and retail ADSL	3,014,158	2,978,987	2,920,338	2,901,333	2,877,414
Other Telstra DSL products	57,041	58,151	60,296	60,902	58,074
Unbundled lines	1,269,222	1,331,671	1,435,141	1,502,492	1,561,488
Total	4,340,421	4,368,809	4,415,775	4,463,727	4,496,976

Note: Unbundled lines include ULLS and LSS services in operation.

Source: ACCC, Snapshot of Telstra's customer access network as at 30 June 2010, www.accc.gov.au/content/index.php?id=/item/853523.

Nearly all unbundled lines (97 per cent) were located in exchanges in central business districts and major metropolitan areas. Services over unbundled local loops were available from 559 out

of a total of 5,067 exchange service areas (ESAs) and 75 per cent of these exchanges had more than one access seeker. Table 1.6 shows the number of access seekers per exchange service area at June 2010.

Table 1.6 Number of exchange service areas by number of access seekers, June 2010

Number of access seekers using ULLS and/or LSS	Number of ESAs
0	4,508
1	139
2	82
3	59
4	65
5 or more	214
Total	5,067

Source: ACCC, Snapshot of Telstra's customer access network as at 30 June 2010, www.accc.gov.au/content/index.phtml/itemId/853523.

Wireless

Wireless technology is emerging as a rapidly growing access technology in Australia. There are two platforms for the provision of wireless internet services in Australia: fixed-wireless broadband and mobile network broadband.

Table 1.7 presents subscriber growth rates for each of the broadband technologies utilised in Australia. While the number of mobile wireless broadband subscribers in Australia continues to increase, the rate of growth has slowed since June 2009. In the six months to June 2010, mobile wireless broadband subscribers (excluding mobile handset broadband) increased by 22 per cent compared with 40 per cent in the six months for December 2009 and 48 per cent in the six months to June 2009.

Other broadband access technologies such as satellite and fixed-wireless also recorded similar or higher growth rates; however these technologies are growing from a significantly lower subscriber base.

Table 1.7 Broadband internet subscriber by technology type by quarter

Broadband access technology	Dec-08 ('000)	Jun-09 ('000)	Dec-09 ('000)	Jun-10 ('000)	% change from Dec-08 to Jun-09	% change from Jun-09 to Dec-09	% change from Dec-09 to Jun-10
DSL	4,208	4,171	4,178	4,246	-0.9%	0.2%	1.6%
Cable and fibre	916	931	909	n/p	1.6%	-2.4	n/p
Satellite	80	90	107	113	12.5%	18.9%	5.6%
Mobile wireless*	1,369	2,024	2,838	3,455	47.8%	40.2%	21.7%
Other	112	117	27	n/p	4.5%	-77%	n/p
Total broadband	6,685	7,333	8,059	8,768	9.7%	9.9%	8.8%
Total internet subscribers	7,996	8,420	8,951	9,569	5.3%	6.3%	6.9%

*Includes data cards and dongles. Excludes mobile handset internet. Revisions: Dec 09 figures were revised by ABS in June 2010.

Note: Fixed-wireless not identified separately due to revision of estimates for June 2009 and December 2009.

n/p: not published for specified quarter but included in total.

Counts of subscribers published prior to release of the June 2010 quarter ABS report may vary from numbers published in the June report due to ABS revisions.

Source: ABS, 8153.0—Internet Activity, Australia, June 2010.

During the June quarter of 2010, the ABS commenced collecting mobile handset internet statistics. The ABS reports that there were 6.8 million mobile handsets with a wireless internet

connection at June 2010. This is in addition to the 3.5 million mobile wireless dongle/datacard services.

Fixed-wireless broadband, for example WiMAX, uses an air interface to connect a broadband service. An antenna installed at the customer's premises receives signals from the service provider's base station. At June 2010, there were approximately 164 fixed-wireless broadband providers in Australia, operating in both metropolitan and rural areas, compared with 233 at June 2009.³⁴ According to the ABS, fixed-wireless broadband accounts for less than one per cent of internet connections.³⁵

Far more significant is mobile network broadband, which has seen rapid growth in subscriber numbers in the last 12 months. Mobile network broadband services can be accessed on a PC or a laptop via a USB modem, dongle or datacard (referred to in this report as 'mobile wireless broadband') or on a mobile phone handset or device (referred to in this report as 'mobile handset broadband').³⁶

Factors that have contributed to the increasing take-up of mobile network broadband include:

- > improvements in 3G technology, network coverage and capacity, in particular faster download and upload speeds
- > the increasing functionality of mobile telephone handsets
- > providers competing on price and payment options in order to attract this growing customer segment
- > a growing range of applications and services.

Mobile network data rates

During 2009–10, mobile carriers increased data rates of their 3G mobile networks and are expected to continue upgrades in coming years.

High speed packet access (HSPA) is a performance enhancing protocol suite upgrade that has been applied to most 3G networks in Australia based on universal mobile telecommunications system (UMTS) wideband code division multiple access (WCDMA) technology. For HSPA protocols to increase data rates, they must be implemented at the network base station and access devices such as mobile phone handsets and laptops. The two component protocols of HSPA, high-speed downlink packet access (HSDPA) and high-speed upload packet access (HSUPA), work together to improve spectral efficiency resulting in improved data rates and capacity. For further information see the ACMA's *Technology developments in the digital economy report* (August 2010).

Advertised theoretical download speeds provided currently by the major network providers vary. The maximum advertised download speeds range from 2.6 Mbit/s up to 42 Mbit/s in selected areas recognising that such quoted maximums are not necessarily indicative of typical download speeds. A number of factors affect download speeds including: location, network congestion, distance from tower, and general network and internet traffic. Table 1.8 provides a snapshot of the technology used by mobile broadband network operators.

As networks upgrade, customers will be required to have compatible devices to take advantage of the increased data rates provided by their carrier. Currently, the speeds available through mobile networks appear to vary significantly with the typical downstream speeds generally well below the quoted maximum and highly dependent on the specific access circumstance.

Table 1.8 Mobile broadband network technology

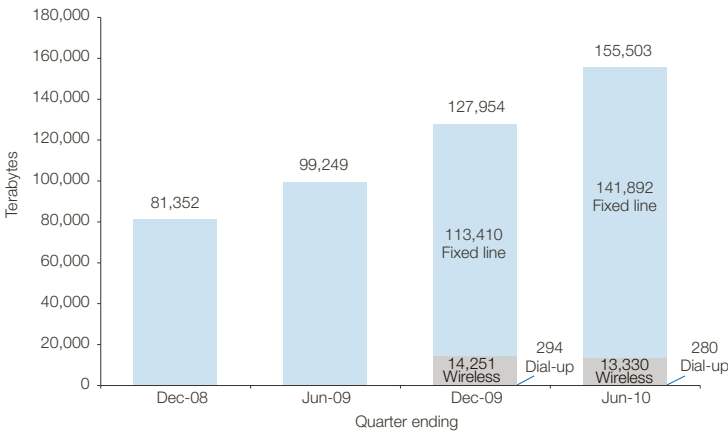
Network owner	Technology used
Telstra	HSPA+ with Dual Carrier technology
Optus	HSPA
VHA	HSPA

Source: Publicly available information from company websites and reports.

As Figure 1.10 shows, while wireless broadband has driven growth in the broadband market in Australia over several years in terms of number of broadband subscribers, fixed-line broadband networks are still used for the overwhelming majority of data downloaded in Australia.

During the June quarter of 2010, internet users in Australia were estimated to have downloaded 155,503 terabytes of data, a 56 per cent increase on the download figures from June 2009 quarter. The bulk of this data is downloaded via fixed-line broadband services, which accounted for 91 per cent of data downloads at June 2010. In addition, downloads via the internet from mobile handsets only accounted for an additional 717 terabytes of data in Australia during the June quarter 2010.

Figure 1.10 Volume of data downloaded by Australian internet users



Note: ABS did not publish statistics on the volume of data downloaded by technology prior to December 2009. Previous reporting periods have been excluded due to ABS targeting ISPs with more than 10,000 subscribers. Revisions: Dec 09 figures were revised by ABS in June 2010. ABS reports that 'download data presented should only be considered an indicative measure of internet activity during the reference period and therefore should be used with caution.'
Source: ABS, 8153.0–Internet Activity, Australia, June 2010.

Hybrid fibre coaxial

Telstra, Optus and Neighbourhood Cable operate hybrid fibre coaxial (HFC) networks.³⁷ Telstra's HFC network passes more than 2.7 million homes in Adelaide, Brisbane, the Gold Coast, Melbourne, Perth and Sydney. Optus' network passes 1.4 million homes in Brisbane, Melbourne and Sydney.³⁸

Neighbourhood Cable, a subsidiary of Canberra-based TransACT Communications, operates an HFC network providing pay TV, broadband/internet and VoIP telephony services in the regional Victorian cities of Mildura, Ballarat and Geelong.

Typically, HFC networks can provide download speeds of up to 30 Mbit/s, but Telstra, Optus and Neighbourhood Cable are all moving to upgrade their networks to the DOCSIS (data over cable service interface specification) 3.0 standard, which can provide download speeds of up to 100 Mbit/s. Telstra has completed the upgrade of its cable network in Melbourne, covering approximately one million homes.³⁹ Optus and Neighbourhood Cable have both announced that they will be upgrading their networks with DOCSIS 3.0 during 2010.⁴⁰

Satellite

Satellite broadband services are available throughout Australia, but primarily serve Australians living in areas of low population density. Most providers are regional ISPs reselling services to customers in regional, rural and remote areas.

Government programs

Government policy initiatives relating to the rollout of the National Broadband Network (NBN) stand to act as further impetus to the development of the digital economy in Australia and to innovation in the area of applications development and service delivery.

National Broadband Network

The Australian Government established the NBN Co Limited in April 2009 to build and operate a wholesale NBN with fibre to the premise (FTTP) connections.

In August 2009, McKinsey-KPMG was appointed as lead advisor for the National Broadband Network Implementation Study. The study, which was released in May 2010, recommended that the NBN be implemented by deploying a mix of fibre, wireless and satellite technologies.

The study recommended the deployment of fibre to 93 per cent of premises, a fixed-wireless service to another four per cent of premises and a satellite service to the remaining three per cent of premises. Next generation fixed-wireless and satellite services would be capable of delivering data rates of at least 12 Mbit/s.

The government has designated fibre as the preferred access network technology to meet Australia's future telecommunications needs. It can readily meet the objective of 100 Mbit/s data rates and is the optimal medium for data transmission, with a lifespan of 40 years or more. This network would offer wholesale-only equivalent access to service providers. The study predicted that it is likely to emerge over time as the predominant fixed-line access network.

The study found that wireless technologies have a substantial role to play in delivering broadband services to premises beyond the fibre footprint, particularly in light of the anticipated complexity of the boundary between fibre and non-fibre areas. But while wireless networks will continue to be important, as bandwidth-hungry applications and content become more prevalent, they are expected to become a complement to fibre, rather than a substitute.⁴¹

Satellite is the only economically feasible way to deliver broadband to the least densely populated parts of Australia. A satellite service would need to be configured to cover effectively the whole of Australia's land mass and would ensure coverage for premises in wireless blackspots.

Work on the NBN rollout began in Tasmania in September 2009. This stage has connected three communities, totalling 4,000 premises.

In March 2010, NBN Co announced that fibre to the premises technology will be deployed at the following five 'first-release' sites in mainland Australia:

- > part of the suburb of Brunswick in Melbourne
- > an area of Townsville covering parts of the suburbs of Aitkenvale and Mundingburra
- > the coastal communities of Minnamurra and Kiama Downs, south of Wollongong
- > an area of west Armidale, New South Wales, including the University of New England
- > the rural town of Willunga in South Australia.

These sites, most of which contain approximately 3,000 premises, will be used to test network design and construction methods in a range of situations. Work is due to commence in the second half of 2010, with services available from early 2011.⁴²

National Broadband Network Regional Backbone Blackspots Program⁴³

In December 2009, Nextgen Networks was selected through a competitive tender process to construct new broadband backbone infrastructure under the \$250 million National Broadband Network Regional Backbone Blackspots Program. 'Blackspots' refers to areas where there is a lack of competitive backbone infrastructure, limiting the broadband access choices available to regional people and businesses.

The objectives of the program are to:

- > deliver an immediate economic stimulus
- > reduce the cost of broadband services
- > put in place key infrastructure for the rollout of the NBN.

Under the program, approximately 6,000 kilometres of optical fibre cables will be laid in the following six priority regional locations, which were selected after public consultation:

- > Geraldton, Western Australia
- > Darwin, Northern Territory
- > Emerald and Longreach, Queensland
- > Broken Hill, New South Wales
- > Victor Harbour, South Australia
- > south-west Gippsland, Victoria.

This infrastructure will provide more than 100 access points for regional locations along the routes to the priority locations.

The Minister for Broadband, Communications and the Digital Economy (the Minister) officially launched the start of construction in Mt Isa in February 2010 and in Geraldton in May 2010. The rollout is expected to be completed by mid-2011.

Digital Regions Initiative⁴⁴

The Digital Regions Initiative funds projects that use broadband and digital technologies to improve health, education and emergency services in regional, rural and remote communities. Projects are co-funded in partnership with state, territory and local governments. The initiative forms part of the Australian Government's response to the Regional Telecommunications Review (established in August 2007). It began in 2009 and will run until 2013, with \$60 million in funding.

Eleven projects have been selected in the first funding round, covering areas such as the provision of ICT-enabled health, education and training services in remote Northern Territory towns, the provision of mobile computing terminals in ambulance vehicles, telehealth services, online professional development for health workers and bushfire spotting and response technologies. Guidelines for the second funding round were released in May 2010.

Carrier licensing

In 2009–10, the ACMA granted 19 carrier licences and four nominated carrier declarations (NCDs).⁴⁵ In the same period, 17 carrier licences were surrendered and one NCD was revoked.

The ACMA has granted 292 carrier licences since the introduction of the *Telecommunications Act* 1997. Of these licensed carriers, 177 were still operating at June 2010. In the same time, 116 NCDs have been granted, of which 75 are still active.

A variation in the number of licensed carriers is often seen as a useful indicator of telecommunications industry activity. Figure 1.11 shows the number of carrier licences and NCDs granted by the ACMA each financial year since 2003–04.

The number of carrier licences (19) granted in 2009–10 was lower than the number (22) in 2008–09, and was below the average of approximately 22 carrier licences per year. The four NCDs granted by the ACMA in 2009–10 were also below the long-term average of approximately nine per year.

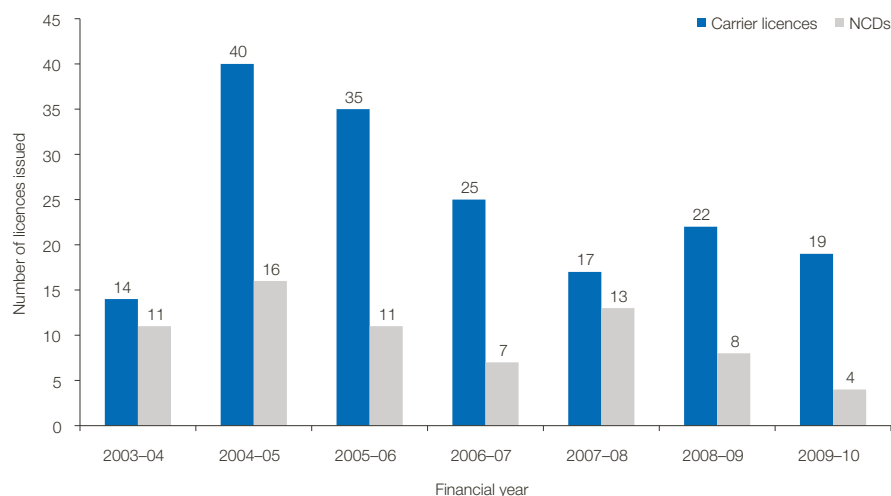
Demand for licences and NCDs generally coincides with periods of relative financial stability and also innovation in the market. As such, the level of activity in 2009–10 may have been affected by global financial uncertainty.

Allocation of numbers

smartnumbers[®]

In 2004, the smartnumbers[®] auction system was introduced as an allocation system for freephone and local rate numbers (FLRNs)—13, 1300 and 1800 numbers. The auction system was introduced as an efficient means of allocating these numbers and enables an appropriate return for this valuable and limited resource. The ACMA currently conducts a public auction each fortnight.

Figure 1.11 Trends in carrier licensing



Source: ACMA licensing figures.

In 2010, the ACMA received 20 submissions from industry in response to the discussion paper *Possible changes to the operation of smartnumbers®*, including a reduction in the reserve prices, which was released for public consultation in December 2009. After considering the industry feedback, the ACMA reduced the smartnumbers® reserve prices by around 50 per cent, replaced the charities auction process with the public auction process and made some minor administrative improvements to the auction.⁴⁶ These changes increased the efficiency of the auction process and made smartnumbers® more affordable. Since implementation in May 2010, the industry demand for smartnumbers® increased by 90 per cent over the average demand in the previous 12 months.

In 2009–10, the ACMA sold 4,842 numbers through the smartnumbers® auction process and raised \$3,096,102 in revenue. In addition, a total of 41 smartnumbers® were sold through a concessional auction process for charities, raising \$4,100 in revenue.

Telephone number allocations

In 2009–10, there was an increase in digital mobile numbers allocated to CSPs and a reduction in the allocation of geographic numbers to CSPs. Changes in the allocation of numbers appears consistent with the long-term industry trend away from geographic numbers.

Geographic numbers

Geographic number allocation fell to 1.48 million in 2009–10, compared with 3.13 million in 2008–09. Figure 1.12 shows the allocation of geographic numbers from 2003–04 to 2009–10.

In 2009–10, a total of 15,000 geographic numbers were surrendered by CSPs, up from 4,300 numbers during 2008–09 and down from 23,000 in 2007–08.

Digital mobile numbers

During 2009–10, allocation requests for mobile numbers increased to 5.6 million numbers, up from 2.4 million in 2008–09. At 30 June 2010, more than 35 million digital mobile numbers had been allocated to CSPs in Australia.

Location-independent communications service (LICS) numbers

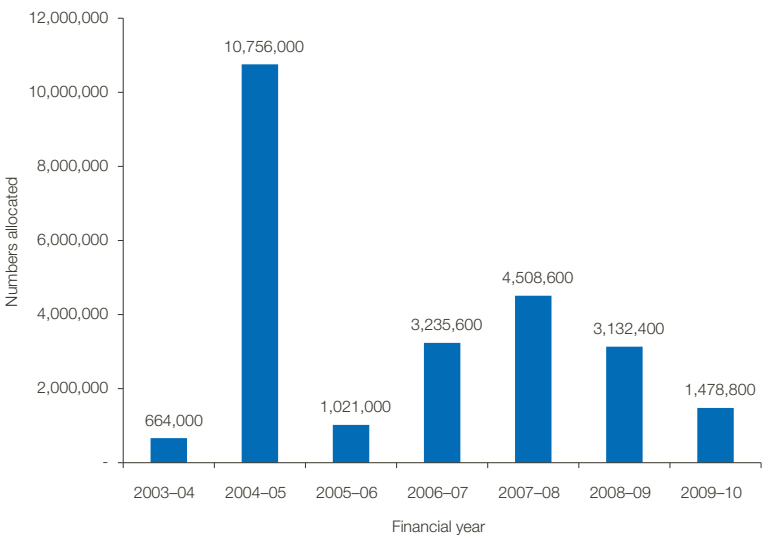
In 2007, the ACMA made available numbers commencing with 0550 for use by location-independent communications services (LICS). The range was introduced for use by IP-based services that depart significantly from traditional telephone services, in particular, where the service is nomadic, that is, not fixed in a particular geographic location.

No additional numbers were allocated for this range during 2009–10; however, 7,000 numbers remain allocated to six IP-based CSPs for LICS. None of the larger or ‘traditional’ telephony CSPs held an allocation of LICS numbers during 2009–10.

Other numbers

Apart from geographic and digital mobile numbers, there was limited demand from CSPs for other number types in 2009–10. The ACMA did, however, allocate 6,000 data network access service numbers, eight international signalling point codes, three mobile number codes and three pre-select codes.

Figure 1.12 Geographic number allocations



Source: The ACMA.

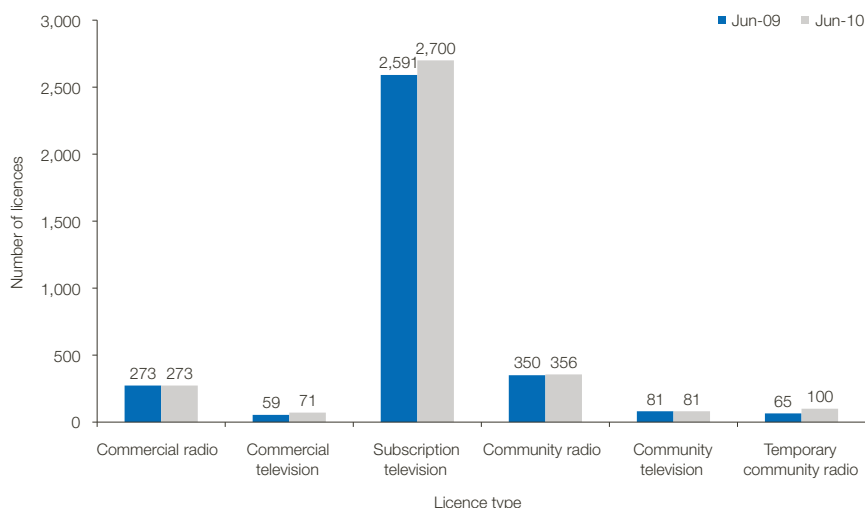
Broadcasting services

Figure 1.13 provides an overview of the current number of broadcasting licenses active in Australia. For the commercial radio and community television sectors the number of license broadcasters has remained unchanged while subscription television, community radio and temporary community radio licence numbers have increased. At June 2010, there were 344 commercial broadcasting (radio and television) licenses, 2,700 subscription television licences and 537 community radio and television licences (including temporary licences) active in Australia. Developments relating to each category of licences will be discussed further in the following sections of this chapter.

Commercial broadcasting services

Commercial broadcasting services comprise free-to-air radio and television services that are made available to the general public. Commercial free-to-air broadcasting services are also licensed to operate within a specified geographic area and have regulations to limit concentration of their ownership and control.

Figure 1.13 Number of broadcasting licences in operation in Australia



Source: ACMA licensing numbers.

Ownership and control of commercial television services

Only a small number of control changes occurred in the media industry during the 2009–10 financial year. Most of the ownership and control changes in the reporting year were as a result of financial or company restructures, rather than the transfer of licences to different media networks or groups.

In May 2010, the ACMA allocated two new digital-only commercial television licences, one to service the Mt Isa television licence area and the other to service the remote central and eastern Australian television licence area. Both licences were allocated to Central Digital Television Pty Ltd.⁴⁷

In April and May 2010, a merger of Seven Network Limited with Kerry Stokes' WesTrac Holdings Pty Ltd involved the creation of Seven Group Holdings Limited. Seven Group Holdings Limited has a controlling interest in Seven Media Group Limited along with the Kohlberg Kravis and Roberts group of companies (KKR). Seven Media Group Limited controls the Seven Network commercial television licences.

A discussion of broadcasters' compliance with notification of change in control requirements is provided in Chapter 4 of this report.

Three networks—Seven, Nine and Ten—operate commercial television broadcasting licences in predominantly metropolitan markets. Their programming is also made available in regional markets through affiliation agreements with the regional television licences controlled by Prime Media Group Limited, Southern Cross Media Group Limited, WIN Corporation Pty Ltd and Imparja Television Pty Ltd.⁴⁸

Seven Network

Seven Network Limited controls six commercial television licences and operates television licences in the metropolitan mainland markets of Sydney, Melbourne, Brisbane, Adelaide and Perth, and one regional licence covering regional Queensland.

Nine Network

Nine Network Australia (Holdings) Pty Ltd controls six commercial television licences and operates television stations in the metropolitan mainland markets of Sydney, Melbourne, and Brisbane.

Nine Network Australia (Holdings) Pty Ltd also controls two regional licences, one each in the Darwin and northern New South Wales licence areas, and a digital-only television joint venture with Southern Cross Media Group Limited in the Darwin licence area.

Network Ten

Ten Network Holdings Limited controls five commercial television licences and operates television stations in the metropolitan mainland markets of Sydney, Melbourne, Brisbane, Adelaide and Perth. On 1 October 2009, CanWest Global Communications Corp sold all of its 50.1 per cent interest in Ten Network Holdings Limited to a broad range of institutional investors.

WIN Corporation

WIN Corporation Pty Ltd controls 18 regional commercial television licences across Australia. This number includes digital-only television licences through joint venture partnerships with Southern Cross Media Group Limited in Tasmania and with Prime Media Group in the Mildura, Geraldton, Kalgoorlie, Western Zone, South West and Great Southern television licence areas.

WIN Corporation Pty Ltd also controls two metropolitan commercial television licences affiliated with Nine Network programming in the Perth and Adelaide metropolitan markets.

Southern Cross Media Group

Southern Cross Media Group Limited (formerly Macquarie Media Holdings Limited) controls 17 regional commercial television licences across Australia including joint ventures in relation to digital-only television services in Darwin, Tasmania, Spencer Gulf, Mt Isa and the remote central and eastern Australia licence areas.

Prime Media Group

Prime Media Group Limited controls 13 regional commercial television licences across Australia including joint venture partnerships with the WIN Corporation Pty Ltd in respect of digital-only television licences servicing the Mildura, Geraldton, Kalgoorlie, Western Zone, South West and Great Southern licence areas.

Ownership and control of commercial radio services

Radio ownership arrangements continued to show differences between capital city and regional markets. Austereo Group Limited, Australian Radio Network Pty Ltd (ARN), DMG Radio Investments Pty Ltd and Fairfax Media Limited own the majority of capital city commercial radio broadcasting licences.

Southern Cross Media Group Limited, Super Radio Network/Broadcast Operations and Grant Broadcasters Pty Ltd remain the three largest networks of regional commercial radio broadcasting licences.

Eleven radio licence owner groups control five or more commercial radio broadcasting licences — ACE Radio Broadcasters Pty Ltd, ARN, Austereo Group Limited, DMG Radio Investments Pty Ltd/Illyria Investments, Fairfax Media Limited, Grant Broadcasters Pty Ltd, Southern Cross Media Group Limited, Prime Media Group Limited, Redwave Media Limited, the Smart Radio Group (Pinecam Pty Ltd) and Super Radio Network (Broadcast Operations Pty Ltd). Another 21 radio licence owners/controllers hold fewer than five licences each.

Key changes

In November 2009, Illyria Radio Investments Pty Ltd acquired a 50 per cent interest in the commercial radio broadcasting licences held by the DMG Radio Group (including the Nova and Vega stations).

On 5 January 2010, Sir Anthony O'Reilly's interest in Independent News and Media PLC (INM) was diluted to less than 15 per cent and he ceased to be a controller of INM. INM is a controller of 12 commercial radio licences through its stake in ARN.

In April 2010, Macquarie Radio Network Limited and Harbour Radio Pty Ltd (2GB) entered into arrangements with Pacific Star Network Limited which placed Macquarie Radio Network Limited in a position to exercise control of a radio licence controlled by Pacific Star Network Limited servicing Melbourne.

Cross-media ownership

A small number of companies control two types of media assets in the same market.

Southern Cross Media Group controls a combination of radio and television broadcasting licences in 33 licence areas, up from 31 licence areas in 2008–09.

Fairfax Media Limited controls both radio licences and a newspaper in two metropolitan licence areas, Sydney and Melbourne.

Seven Network Limited controls a television licence and is deemed to be in a position to exercise control of a newspaper in the Perth metropolitan licence area.

WIN Corporation controls a radio and television licence in the Wollongong licence area. These arrangements are unchanged from 2008–09.

Register of Controlled Media Groups

The Register of Controlled Media Groups is a core component of media ownership rules. The register, published on the ACMA's website, provides information to industry and the community about the existence of registered media groups operating in licence areas across Australia, the media operations that form each group, and the controllers of those operations. When the register was first published in March 2007, it contained 131 media groups. The number increased to 201 by 30 June 2010, compared to 160 media groups registered at June 2009.

Subscription television in Australia

In the financial year 2009–10, the ACMA allocated 79 subscription television broadcasting licences to Fetch TV Pty Ltd and 30 subscription television broadcasting licences to iiNet Pty Ltd. These licences increased the total number of subscription television broadcasting licences allocated by the ACMA to 2,700 at June 2010, compared to 2,591 at June 2009.

At 30 June 2010, there were more than 2.38 million subscribers to subscription television services in Australia, compared to 2.3 million at June 2009.

Foxtel reported a total of 1.63 million subscribers, including wholesale subscribers at June 2010 unchanged from June 2009.⁴⁹

Austar had 747,148 subscribers, an increase of 18,429 (nearly three per cent) in the year ending 30 June 2010.⁵⁰ Residential subscribers to Austar increased by just over one per cent to 616,000, while commercial subscribers increased by eight per cent to 131,000.⁵¹

Community broadcasting services

Community broadcasting services are radio and television broadcasting services that serve the needs and interests of particular communities.

Unlike commercial broadcasting services, community broadcasting services are provided for community purposes, must not be operated for profit or as part of a profit-making enterprise, and must encourage community participation in service operation and programming.

The ACMA allocates long-term community broadcasting licences on a merit basis for the use of the broadcasting services bands (BSBs) to provide community radio and television services. Community broadcasting licences remain in force for five years. The ACMA may renew the licence on application from the licensee before the expiry of the licence.

Since 1992, the number of long-term community radio broadcasting licences has increased from 102 to 356 (as at 30 June 2010). The services represent a range of community interests (Table 1.9). Nearly 48 per cent of community radio broadcasting services represent the general community in their respective licence areas.

During the reporting period, the ACMA:

- > renewed 54 community radio broadcasting licences (17 with conditions)
- > advertised for applications and allocated 10 community radio broadcasting licences in Gosford and Lake Macquarie (New South Wales), Fremantle and Perth (Western Australia), Bendigo (three licences) and Geelong (both Victoria), Alice Springs (Northern Territory) and Port Augusta (South Australia)
- > did not refuse to renew any community radio broadcasting licences.

Also:

- > one community radio licence expired
- > one community radio licence was surrendered.

Table 1.9 Community radio broadcasting services by community interest, June 2010

Community interest	Number of licenses	% of total
Aboriginal and Torres Strait Islander	99	27.8%
Educational/special interest	22	6.2%
Ethnic	6	1.7%
General geographic area	170	47.8%
Music	8	2.2%
Religious	34	9.6%
Senior citizen	9	2.5%
Youth	8	2.2%
Total	356	100%

Source: The ACMA.

Temporary community radio broadcasting licences

The temporary community radio broadcasting licence scheme allows the ACMA to allocate non-renewable community radio licences to eligible aspirant broadcasters. The temporary licensing scheme gives aspirant broadcasters the opportunity to develop broadcasting skills and gain community support for the service. Licences are allocated only if spectrum in the broadcasting services bands is available for transmission. Temporary licences are allocated for a maximum 12-month period. However, a licensee may apply for a further temporary licence before the expiry of their licences.

There were 100 temporary licences at 30 June 2010. Of these, eight are sharing the use of three frequencies (in Young and Bankstown, New South Wales and in Goolwa, South Australia).

Community television services

There were 81 long-term community television broadcasting licensees at 30 June 2010, of which three are in the metropolitan areas of Brisbane, Melbourne and Sydney. The remaining 78 are remote Indigenous broadcasting services. The ACMA did not renew any community television broadcasting licences during the reporting period.

Community television trials

During 2009–10, the ACMA made spectrum available for community television trials in:

- > Adelaide—for the period 5 July 2009 to 4 July 2011
- > Lismore—for the period 29 June 2009 to 28 June 2011
- > Perth—for the period 16 April 2009 to 15 April 2011.

These services were made possible by a condition on the apparatus licences that they be used only to provide an open narrowcasting television service for community and educational non-profit purposes.

Digitisation of community television services in metropolitan areas

On 4 November 2009, the Minister announced a pathway for the five existing long-term and trial community television services in metropolitan areas to broadcast in digital mode. The initiative provides for the:

- > simulcast of three long-term community television services (in Sydney, Melbourne and Brisbane) and one trial community television service (in Adelaide)
- > trial community television service in Perth to transmit only in digital mode.

Each metropolitan community television broadcaster has been allocated a new apparatus licence to provide digital services (Table 1.10). These licences contain specific conditions which reflect the parameters set by the government's decision. The Adelaide service has yet to commence digital transmission.

Table 1.10 Digital transmission of community television services, June 2010

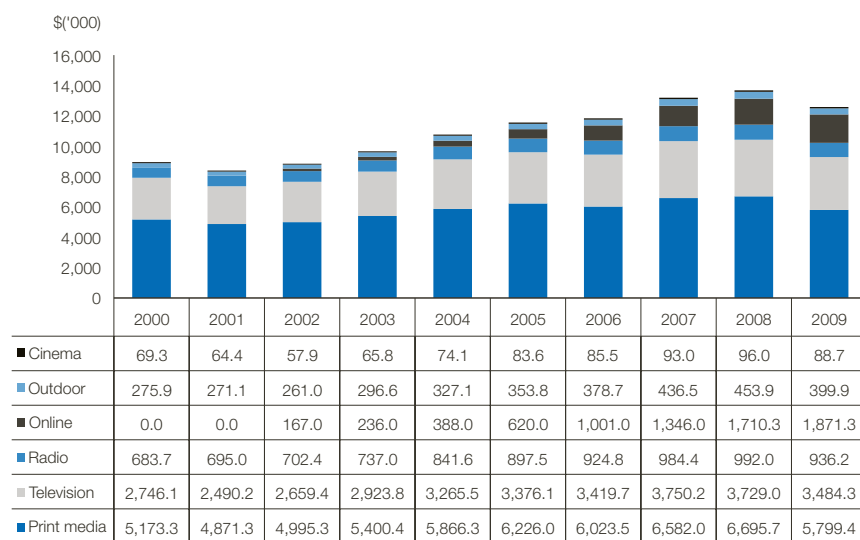
Area served	Digital transmission start date	Apparatus expiry date
Sydney	1 March 2010	20 March 2011
Perth	1 April 2010	15 April 2011
Melbourne	28 May 2010	18 February 2011
Brisbane	1 June 2010	1 March 2011
Adelaide	Before the end of 2010	Not yet available

Source: The ACMA.

Advertising expenditure in media

Trends in advertising expenditure provide an indication of changing patterns of media consumption, particularly in the face of emerging alternative content distribution channels such as the internet and changing consumer preferences for media consumption. Commercial Economic Advisory Service of Australia (CEASA) data shows that advertising expenditure across the media categories (print, television, radio, online, outdoor and cinema) has risen consistently over the past decade (Figure 1.14). However, the latest CEASA data for the year ended 31 December 2009 has estimated that total advertising expenditure decreased by eight per cent during the 2009 calendar year to \$12.6 billion.⁵²

Figure 1.14 Distribution of advertising expenditure across media, by calendar year



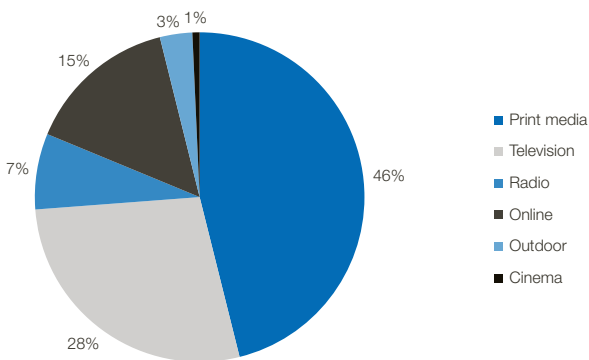
Source: Commercial Economic Advisory Service of Australia, year ended 31 December 2009.

As Figure 1.14 shows, industries that attracted the majority of advertising expenditure in 2009 were print (46 per cent), television (28 per cent), online (15 per cent) and radio (seven per cent).

The CEASA figures also illustrate the continuing growth of online advertising in Australia. During the year, online advertising grew by nine per cent to total \$1.9 billion—which represents a 15 per cent share of total media advertising expenditure. In 2008, the online sector had a 13 per cent share.

Overall, the print media share of total advertising expenditure has decreased over the past year. Since 2007, the print media sector's share has fallen below 50 per cent (49.89 per cent in 2007, 48.96 per cent in 2008). In 2009, this trend continued and the print media sector now accounts for just over 46 per cent of total advertising expenditure. In contrast, over the same period, the television sector's share of total advertising has been stable as it remained around 28 per cent of total expenditure.

Figure 1.15 Proportion of 2009 advertising expenditure breakdown by main media category



Source: Commercial Economic Advisory Service of Australia, year ended 31 December 2009.

Television

Table 1.11 provides a comparison of the CEASA figures for advertising expenditure on television in 2008 and 2009. The free-to-air television sector's (percentage) share of total advertising expenditure has remained stable. However, in terms of advertising expenditure, metropolitan television reported a decrease of just over eight per cent while regional television reported a decrease of nearly six per cent. Over the same period, subscription television increased its (percentage) share of total advertising expenditure from 2.3 per cent in 2008 to 2.6 per cent at the end of 2009. For the 2009 calendar year, subscription television recorded advertising expenditure of \$332.7 million, an increase of just less than five per cent over the previous year's performance of \$317 million.

For the year ending 31 December 2009, the CEASA figures show that advertising expenditure on free-to-air television (excluding SBS) is dominated by the eastern seaboard states, with the metropolitan market of Sydney alone accounting for \$861 million of advertising revenue and the rest of the state contributing \$326.2 million. The highest advertising expenditure was recorded by New South Wales (\$1,187.3 million) followed by Victoria (\$761 million) and Queensland (\$596.5 million).

Table 1.11 Advertising expenditure on television, 2008 and 2009

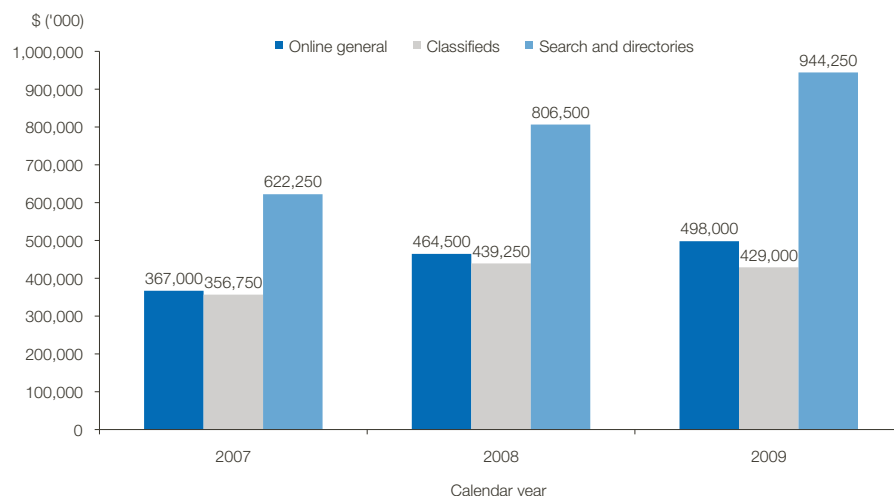
Television platform	2008 total (\$'000)	% total advertising expenditure	2009 total (\$'000)	% total advertising expenditure	% total (\$'000) change
Metropolitan television	2,616,506	19.1%	2,400,197	19.1%	-8.3%
Regional television	795,448	5.8%	751,393	6.0%	-5.5%
Subscription television	317,016	2.3%	332,679	2.6%	4.9%
Total television	3,728,970	27.3%	3,484,269	27.7%	-6.6%

Source: Commercial Economic Advisory Service of Australia, year ended 31 December 2009.

Online

Figure 1.16 shows the continued growth in online advertising expenditure since the 2007 calendar year. The 2009 year was characterised by growth in some, but not all, online advertising categories. Revenue in the general (\$498 million) and search and directories (\$944 million) categories accounted for 26.6 per cent and 50.5 per cent of the total online advertising spend respectively. As in 2008, the search and directories category of the online advertising sector grew the fastest, increasing by 17 per cent during 2009. In contrast, revenue in the classifieds category decreased by just over two per cent.

Figure 1.16 Online advertising



Source: Commercial Economic Advisory Service of Australia, year ended 31 December 2009.

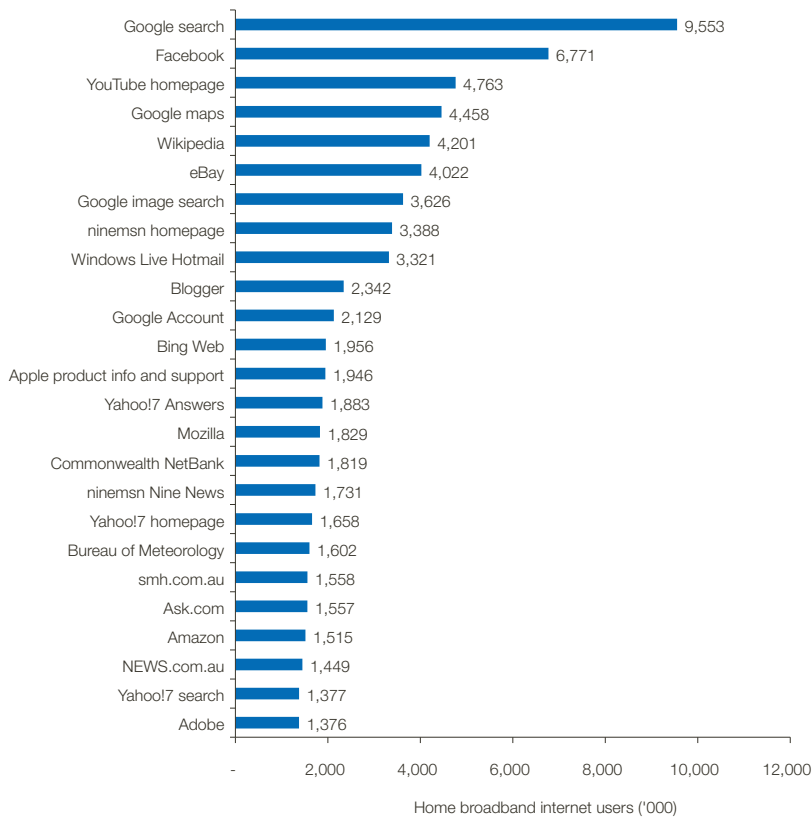
Increasing online participation

The increasing significance of online advertising within Australia is indicative of the growing importance of the internet to economic and social activity in Australia. Over the last five years, the proportion of heavy internet users (going online for more than 15 hours a week) in the Australian population doubled, with 28 per cent aged 14 years and over estimated to be heavy users of the internet. A further 27 per cent were medium internet users, going online between seven to 15 hours in a typical week, while 23 per cent were light internet users, accessing the internet up to seven hours in a typical week.

Not only are Australians spending more time online, they are also accessing a wide range of information and content online, viewing an estimated 18.2 billion web pages hosted within Australia and overseas from home during June 2010 alone.⁵³ Figure 1.17 provides an overview of website traffic originating in Australia during June 2010.

The economic importance of the internet as a business channel is further demonstrated by the fact that internet e-commerce (the value of goods or services sold online) was estimated by the ABS to be \$123 billion during 2008–09. The growing importance of the internet as a marketing channel to advertisers reflects the changing communication and media preferences in Australia. The growing significance of the digital economy in Australia is further explored in the ACMA's 2009–10 Communications report series, *Report 1—Australia in the Digital Economy: The shift to the online environment*.

Figure 1.17 Top 25 websites visited by internet users in Australia, June 2010



Source: Nielsen Online.

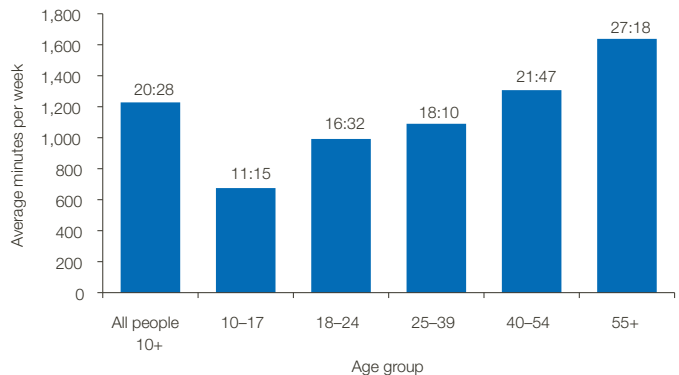
Consumer use of traditional media services

Changing patterns of traditional media consumption provide insight into emerging consumer media preferences and ongoing challenges to commercial broadcasters to maintain audience numbers. This section provides an overview of traditional media consumption during the 2009 calendar year.

Time spent listening

During 2009, weekly time spent listening to radio by people aged 10 years and over averaged 20 hours and 28 minutes per week, or two hours and 55 minutes per day. Levels of radio listening increased with age from an average of 11 hours and 15 minutes for the 10–17 age group, to 27 hours and 18 minutes for listeners aged 55 years and over (Figure 1.18).

Figure 1.18 Average weekly time spent listening to radio (hours:minutes), 2009



Source: Nielsen Radio Ratings 2009 for five mainland state capital cities, surveys 1–8, Mon–Sun 5.30 am–12 midnight.

Location of listening

In order of diminishing importance, radio listening occurs at home, in the car and at work. For all listeners aged 10 years and over, just over half of their radio listening in 2009 took place at home. More than a third of listening occurred in the car for most age groups, except for listeners aged 55 years and over, where 16 per cent of listening was in the car. This older age group did most of their listening at home (79 per cent), as did 10–17-year-olds (53 per cent) and 40–54-year-olds (47 per cent). The workplace was the most popular place of listening for 18–24 and 25–39-year-olds (Table 1.12).

Table 1.12 Place of listening to the radio by age, 2009

Location	Home %	Car %	Work %	Other %
All	54	30	15	2
10–17 years	53	37	5	5
18–24 years	32	37	27	4
25–39 years	33	41	23	2
40–54 years	47	35	17	2
55+ years	79	16	5	1

Percentages may not add to 100 per cent due to rounding.

Source: Nielsen Radio Ratings 2009 for five mainland state capital cities, surveys 1–8, Mon–Sun 5.30 am–12 midnight. (Average audience converted to percentage of place of listening).

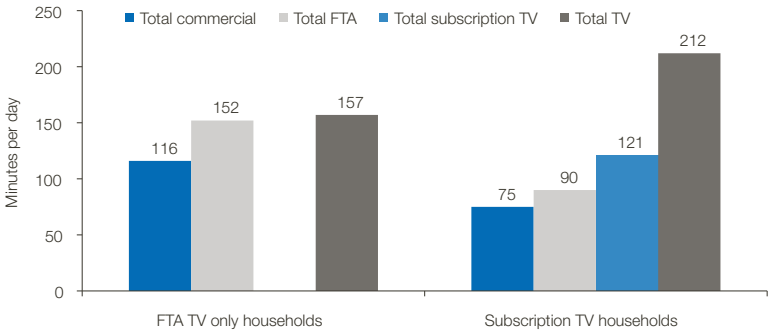
Trends in Australian television audiences

Amount of television watched in free-to-air only and subscription television households

Australian television viewers in free-to-air (FTA) only households spent an average of 157 minutes per day watching television in 2009, with commercial television channels accounting for the majority of their viewing (116 minutes per day) (Figure 1.19).

Viewers in subscription television (STV) households spent 212 minutes per day watching television. Although just over half of this daily viewing was spent watching subscription channel services (121 minutes), viewers in STV households also spent a significant amount of time watching FTA television (90 minutes).

Figure 1.19 Average time spent viewing television in FTA only and STV households, 2009



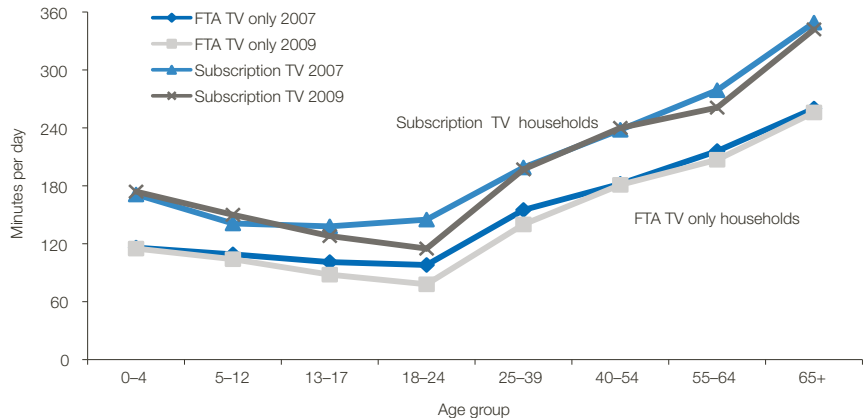
Source: OzTAM Pty Ltd.

Figure 1.20 shows the amount of time spent watching television in FTA only and STV households by people in different age groups, and how this has changed between 2007 and 2009.⁵⁴ Across all age groups, those with STV watch more television than their FTA only counterparts. Also, as people age, they spend more time watching television.

All viewers in FTA only households spent less time watching television in 2009 than they did in 2007. The largest decrease in average time spent viewing occurred in the 13–17, 18–24 and 25–39 age groups. Between 2007 and 2009, their average time spent viewing FTA television for these age groups decreased by 13, 20 and 15 minutes respectively. The 18–24 age group recorded the lowest level of viewing (78 minutes). Among viewers aged 65 plus, the average time spent viewing FTA television in 2009 was 256 minutes per day, a decrease of only four minutes compared to their 2007 viewing levels.

In subscription television households, viewing trends changed by age group over the 2007 to 2009 period. Viewers in the 13–17 and 18–24 age groups, like their counterparts in FTA only households, watched less television in 2009 than they did in 2007. For these groups the average time spent viewing television in STV households decreased by 10 and 30 minutes respectively. The 18–24 age group recorded the lowest level of viewing at 115 minutes in STV households. Older adults (people in the 55–64 and 65 plus age groups) also watched less television in 2009. Viewers in the 55–64 age group averaged 261 minutes of television a day in 2009, a decrease of 18 minutes over the daily amount of television this group watched in 2007 (279 minutes). The trend towards increased levels of television viewing in STV households peaked with the 65 plus age group, who averaged 342 minutes of television a day in 2009, although this is a seven minute decrease on the average amount of television watched by this group of viewers in 2007 (349 minutes).

Figure 1.20 Average time spent viewing television in FTA only and STV households, 2007 and 2009



Source: OzTAM Pty Ltd.

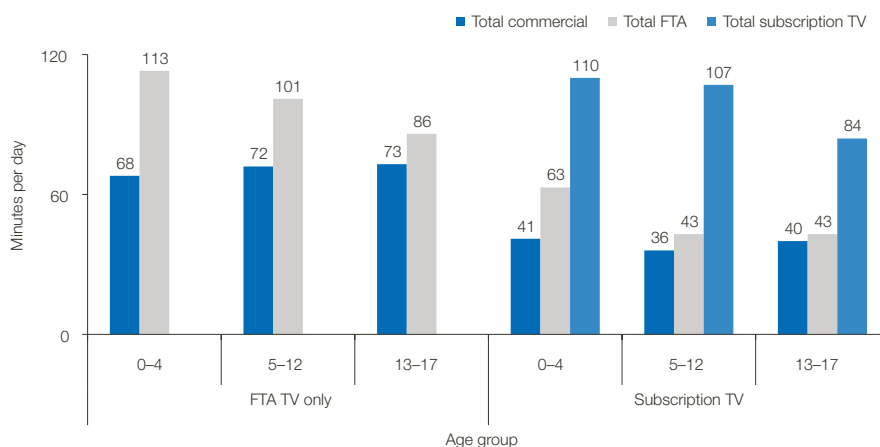
Children's viewing

Children in STV households watched more television than children in FTA only homes, with preschool children in STV households recording high levels of viewing. Figure 3 shows that in addition to 110 minutes of subscription television per day, 0–4-year-olds in STV households watched significant amounts of free-to-air television (63 minutes).

The 0–4-year-olds in FTA only households watched an average of 113 minutes of FTA content each day, with a significant proportion of this being commercial television (68 minutes). Although subscription and commercial television dominated the viewing patterns of the 0–4-year-old age group they watched a significant amount of ABC content. In FTA only households, children aged 0–4 years watched an average of 43 minutes of the ABC network (ABC1 and ABC2) each day, compared to 21 minutes in STV households.

As children move into their primary school (5–12) and teenage (13–17) years, they watch less television than the 0–4 age group, with subscription television dominating the daily viewing of older children in STV homes and commercial television dominating viewing in FTA only households. The amount of time older children spent watching the ABC declined significantly in those homes where subscription television was available (an estimated total of six minutes per day for 5–12-year-olds and three minutes for teenagers). In FTA households, there is a similar decline with age.

Figure 1.21 Average time viewing television by children in FTA and STV households, 2009



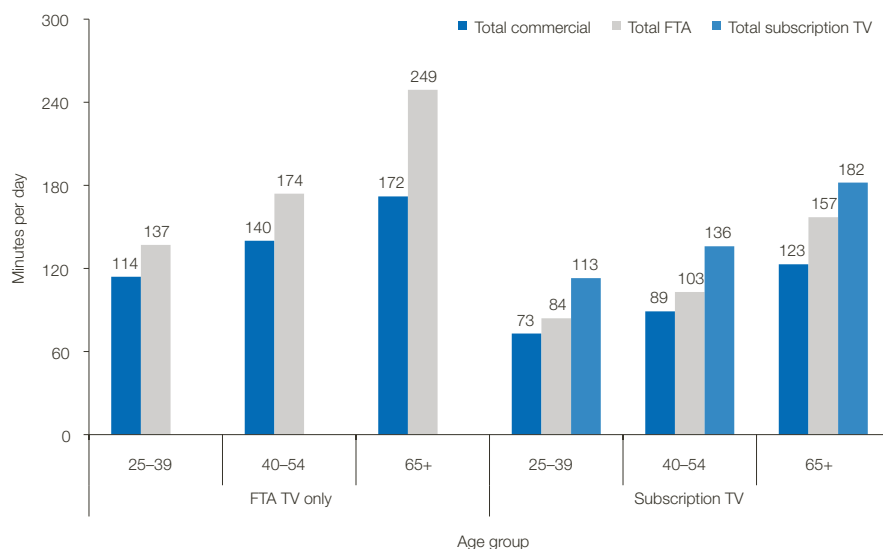
Note: Data predates the introduction of children's digital television channels such as ABC3.

Source: OzTAM Pty Ltd.

Adult's viewing

In line with younger viewers, adults spent less time watching the national broadcasters in STV homes than their FTA only counterparts (Figure 1.22). People aged 65 and over in STV households watched just over half an hour (33 minutes) of ABC and SBS television content per day in 2009, although the majority of their FTA viewing consisted of commercial television content (123 minutes).

Figure 1.22 Average time viewing television by adults in FTA only and STV households, 2009



Source: OzTAM Pty Ltd.

Endnotes

- 1 Market Clarity Database, June 2010. Includes resellers, ISPs.
- 2 Telstra, *Full Year 2010 Financial Results*, 12 August 2010.
- 3 www.techworld.com.au/article/356747/optus_profits_up_growth_strong, 12 August 2010. See additional historical commentary in SingTel financial results presentation Q4 and financial year ended 31 March 2010.
- 4 ACMA-commissioned survey, April 2010.
- 5 Roy Morgan Single Source, June 2010.
- 6 ACMA-commissioned survey, April 2010.
- 7 ACMA-commissioned survey, April 2010.
- 8 ABS, *8153.0-Internet Activity Australia*, December 2009.
- 9 *Communications Day, Issue 3815*, 13 August 2010.
- 10 www.computerworld.com.au/article/343082/telstra_t-hub_launches/, accessed 14 April 2010.
- 11 www.pcworld.idg.com.au/article/350454/telstra_boosts_home_broadband_bundles/, accessed 18 June 2010.
- 12 Vodafone media release, *Vodafone extends 3G coverage: bringing choice and value to regional coverage*, 31 August 2009.
- 13 Paul O'Sullivan, *Leveraging NBN to deliver Australia 3.0*, speech to Committee for the Economic Development of Australia (CEDA) CEO Vision Series, 1 December 2009.
- 14 SingTel media release, *Strong top line growth of 25% to S\$4.47 billion in fourth quarter*, 31 May 2010.
- 15 Mobile wireless is a broadband service offered via mobile networks where the consumer typically connects to the internet via a dongle or datacard connected to a computer.
- 16 ABS, *8153.0-Internet Activity, Australia*, June 2010.
- 17 Post-paid customers are usually billed for their use of a carrier's services on a regular monthly basis, based on either the terms of a contract or on the amount of services they have used.
- 18 The ACMA, *ACMA Communications report, 2008-09*.
- 19 ABS, *8153.0-Internet Activity, Australia, June 2010*. Note: ABS started collecting internet connections via mobile handsets during the June quarter of 2010.
- 20 MMS is the successor of short message service (SMS) that allows users to add multimedia content, such as sound, pictures, graphics and video clips to their text messages. Unlike the SMS, which has a maximum of 160 text characters and cannot exceed 160 bytes, the MMS allows the transmission of up to 100 kilobytes of data. www.phonearena.com/htmls/terms.php?define=MMS.
- 21 The ACMA annual industry data request.
- 22 The decline in numbers may also be attributed to more regular updating of information relating to the number of active players in a market.

- 23 Mitchell Bingemann, *iiNet bulks up to become broadband heavyweight*, *The Australian*, 3 August 2010; Renai LeMay, *Retail service providers an endangered species*, *ITWire*, 30 July 2010, www.itwire.com/it-policy-news/government-tech-policy/40804-retail-service-providers-an-endangered-species; Patrick Stafford, *Competition fierce between telcos*, www.smartcompany.com.au/telecommunications/20100428-competition-fierce-between-telcos.html, 28 April 2010.
- 24 Market Clarity Database, June 2010.
- 25 When applied to a customer base, churn refers to the proportion of customers or subscribers who discontinue their service during a certain time period divided by the total number of subscribers. This rate of attrition is often associated with subscribers switching providers.
- 26 The practice of joining related products together for the purpose of selling them as a single product. Bundling arrangements usually feature special pricing arrangements which make it cheaper to buy the products and services as a bundle than separately.
- 27 The ACMA, 2009–10 Communications report series, *Report 2—Take-up and use of voice services by Australian consumers*, November 2010.
- 28 *iiNet to launch FetchTV as IPTV service 'soon'*, *Exchange Daily*, 13 April 2010. iiNet news, www.iinet.net.au/customers/iinews/news_0610.html#news, accessed July 2010.
- 29 Luke Coleman, *Ericsson opens regional TV centre in Melbourne*, *Communications Day*, 10 November 2009, pages 2–3.
- 30 ABS, *8153.0—Internet Activity, Australia*, June 2010.
- 31 This contrasts with fibre to the node or FTTN, which serves a larger area but where the cabinet may be located some kilometres from the customer's premises.
- 32 ABS, *8153.0—Internet Activity, Australia*, December 2009.
- 33 ACCC, *Snapshot of Telstra's customer access network as at 30 June 2010*, www.accc.gov.au/content/index.phtml/itemId/853523.
- 34 Market Clarity Database, June 2010.
- 35 Note: ABS has revised numbers for previous quarters.
- 36 Numbers relating to handset broadband are not included in ABS subscriber numbers prior to the June 2010 quarter reporting period.
- 37 The ACMA, *ACMA Communications report 2008–09*.
- 38 Telstra and Optus.
- 39 Telstra media release, *Telstra unveils Australia's fastest cable broadband and new digital set top box*, 19 November 2009.
- 40 Paul O'Sullivan, *Leveraging NBN to deliver Australia 3.0*, speech to Committee for the Economic Development of Australia (CEDA) CEO Vision Series, 1 December 2009. Neighbourhood Cable media release, *Neighbourhood Cable to upgrade its network to DOCSIS 3.0*, May 2010.
- 41 McKinsey-KPMG, *National Broadband Network Implementation Study*, May 2010.
- 42 NBN Co media release, *NBN Co announces 'first release' sites for high-speed network*, 2 March 2010.
- 43 www.dbcde.gov.au/broadband/national_broadband_network/national_broadband_network_Regional_Backbone_Blackspots_Program.
- 44 www.dbcde.gov.au/funding_and_programs/digital_regions_initiative.
- 45 A nominated carrier declaration (NCD) permits the owner of one or more network units to nominate a licensed carrier to supply carriage services over those units to the public, subject to the carrier satisfying the ACMA that it would be in a position to comply with carrier-related obligations with respect to those network units.
- 46 The reserve price is the starting bid and the minimum amount a number can be purchased.
- 47 Central Digital Television Pty Ltd is a joint venture between the existing television licensees in those areas: Regional Television Pty Limited, controlled by Southern Cross Media Group Limited (formerly Macquarie Media Holdings Limited) and Imparja Television Pty Ltd.
- 48 Imparja Television Pty Ltd and Southern Cross Media Group Limited jointly control digital-only television licences, one in each of the remote central and eastern Australia television licence area and the Mt Isa television licence area.
- 49 Foxtel, *Foxtel continues earnings momentum*, www.foxtel.com.au/about-foxtel/communications/foxtel-continues-earnings-momentum-84876.htm, 12 August 2009.
- 50 Austar United Communications Limited, *First Half 2010 Year Results*, www.austarunited.com.au, 29 July 2010.
- 51 Austar United Communications Limited, *Churn in line with expectation in Austar's H1 2010 results*, www.austarunited.com.au, 29 July 2010.
- 52 Commercial Economic Advisory Service of Australia (CEASA) *Advertising expenditure in main media, year ended 31 December 2009*, March 2010.
- 53 The ACMA, 2009–10 Communications report series, *Report 1—Australia in the digital economy: The shift to the online environment*, November 2010.
- 54 This data refers to the OzTAM figures for the 6.00 am to midnight period for the five metropolitan markets over the calendar years of 2007 and 2009.



Chapter 2

National interest issues

Overview

Chapter 2 provides information on the performance of the Emergency Call Service, the communication industry's support for law enforcement and national security agencies in terms of maintaining communication interception capabilities and disclosure of information, and protection of Australia's critical submarine cable infrastructure. Key developments in 2009–10 include:

- > decrease in the number of non-genuine calls getting through to the Emergency Call Service
- > increase in disclosures of customer information by carriers and carriage service providers
- > decrease in the cost of providing communication interception capabilities
- > increase in the number of connected records on the Internet Public Number Database (IPND) and improvement in the usability of those records in terms of efficient dispatch of emergency response.

Chapter summary

During 2009–10, the total volume of calls to the emergency call service numbers (Triple Zero (000) and 112) declined by 14 per cent, with just over 8.8 million calls made during this period compared with 10.3 million during the 2008–09 reporting period.

Of the 8.8 million calls to emergency numbers, 95 per cent were answered by the emergency call person (ECPs) while the remaining five per cent of callers terminated the call before reaching the ECP.

In Australia, Telstra is the emergency call person (ECP) for the Triple Zero and the international emergency number 112 for mobile phones. Australian Communication Exchange (ACE) is the ECP for the text emergency service accessed using the 106 number.

The decline in the number of calls has been attributed to the introduction of a recorded voice announcement (RVA) for the emergency call service on 19 December 2008. The RVA provides people who have inadvertently or otherwise dialled Triple Zero with the opportunity to hang up before being connected to an operator, allowing more time for the service to take genuine calls.

Since the introduction of the RVA, the daily number of non-emergency calls to Triple Zero reaching the ECP has declined by 25 per cent, without any genuine emergency calls known to have been affected.

Nearly 60 per cent of calls answered by the ECP during 2009–10 were transferred to emergency service organisations (ESOs), compared to 52 per cent during 2008–09.

Telstra continued to perform above the regulated requirement for emergency call answering with 96.7 per cent of all calls to Triple Zero and 112 answered within five seconds and 99 per cent answered within 10 seconds during 2009–10. The comparable performances in 2008–09 were 96.3 per cent and 98.3 per cent respectively.

During the 2009–10 reporting period, a total of 227 genuine calls to the emergency call service—106 text service—were relayed to ESOs, in 2009–10 compared with 333 in 2008–09.

There were 305,154 disclosures of customer information by carriers and carriage service providers under Part 13 of the *Telecommunications Act 1997* during 2009–10, compared with 332,774 during 2008–09. In addition there were 565,147 disclosures under the *Telecommunications (Interception and Access) Act 1997*, compared with 485,416 during 2008–09.

The cost to the carriers and carriage service providers of providing communication interception capabilities was \$15.7 million during 2009–10, a decrease of six per cent since 2008–09.

The IPND contained approximately 56.7 million connected records at 30 June 2010, compared with 53.7 million at 30 June 2009.

The 2009–10 audit of the IPND revealed that 95.5 per cent of the address records on the IPND are regarded as having high or good useability in terms of the efficient dispatch of emergency response, up from 89.2 per cent recorded in the 2006 audit.

Table 2.1 Key industry statistics

	2008–09	2009–10
Total number of calls to emergency calls service numbers Triple Zero and 112	10,301,011	8,833,683
Telstra's performance in answering calls to emergency services numbers Triple Zero (000) and 112		
Proportion of calls answered within 5 seconds	96.3%	96.7%
Proportion of calls answered within 10 seconds	98.3%	99.0%
Percentage of calls answered by ECP transferred to ESOs	52.0%	59.9%
Genuine calls to the emergency call service—106 text service	333	227
Disclosures of customer information by carriers and carriage service providers (CSPs)	818,190	870,301
Cost to carriers and carriers and CSPs of maintaining interception capabilities	\$16,623,370	\$15,670,689
Number of connected records on the IPND*	53.7 m	56.7 m
Number of organisations listed as data providers to the IPND*	46	75
Radiofrequency interference complaints		
Domestic systems interference complaints	469	465
Radiocommunications interference complaints	676	535

*At 30 June 2010.

m=million.

Emergency call service

The telecommunications industry is required to provide, free of charge, access to the emergency call service on standard telephone services (including mobiles). The emergency call service is an operator-assisted service that connects callers to an emergency service organisation—police, fire or ambulance—in life-threatening or time-critical situations.

The providers of the emergency call service are:

- > Telstra—for calls made to the primary emergency call number, Triple Zero, and to the international emergency number 112 for GSM and WCDMA mobile phones
- > Australian Communication Exchange (ACE)—for calls made to the 106 text service for people who are deaf or have a hearing or speech impairment.

This section outlines the volume and type of calls to the emergency call service, along with the performance of the ECP in answering emergency calls. Various factors, such as the incidence of non-emergency calls and measures like the introduction of an RVA that influenced the performance of the emergency call service, are also explained.

Emergency call service—Triple Zero and 112

ECP data shows that the number of calls to Triple Zero and 112 has been declining from a peak of 12.2 million calls in 2007–08 (see Tables 2.2 and 2.3). There were 8,833,683 calls offered to the Triple Zero and 112 emergency service numbers in 2009–10, a decrease of 1,467,328 (14.2 per cent) from 2008–09.

This decline is attributed largely to the introduction of a RVA for the Triple Zero service in December 2008. The RVA gives people who have inadvertently or otherwise dialled Triple Zero the opportunity to hang up before being connected to an ECP. The 2009–10 reporting period is the first reporting period that the RVA has been in operation for the full 12 months.

Over the last five years, on average, calls from mobile phones represented 62 per cent of all emergency calls compared to 34 per cent made from fixed-line telephones. Four per cent of calls were made from public telephones.

Table 2.2 Call volumes to emergency call service numbers Triple Zero and 112

	2005–06	2006–07	2007–08	2008–09	2009–10
Total number of calls offered	11,588,777	12,139,526	12,220,196	10,301,011	8,833,683

Note: The term 'calls offered' refers to the number of calls made after the RVA.

Source: Emergency call person (Telstra).

Telstra's performance in answering emergency calls

The ACMA's Telecommunications (Emergency Call Service) Determination 2009 (the Determination) sets out performance criteria for the ECP's answering of calls to Triple Zero and 112, as follows:

- > 85 per cent of emergency calls answered within five seconds
- > 95 per cent of emergency calls answered within 10 seconds.

Telstra continues to perform above the regulatory requirement for emergency call answering, with 96.7 per cent of all calls to Triple Zero and 112 answered within five seconds and 99 per cent answered within 10 seconds in 2009–10, in the reporting period.

Calls connected to emergency service organisations

The ECP transfers emergency calls to the relevant state or territory emergency service answering point, which arranges for the dispatch of an emergency response. Of the 8.4 million calls answered by the ECP during 2009–10, 59.9 per cent of calls were connected through to an emergency service organisation compared to 52 per cent during 2008–09.

Table 2.3 Emergency call service call volumes and call answering times

	2005–06	2006–07	2007–08	2008–09	2009–10
Total number of calls offered	11,588,777	12,139,526	12,220,196	10,301,011	8,833,683
Total number of calls answered	10,625,171	11,059,705	11,094,006	9,587,336	8,426,111
Percentage of calls answered	91.7%	91.1%	91%	93.1%	95%
Percentage of calls answered in five seconds or less	96.9%	97.0%	96.2%	96.3%	96.7%
Percentage of calls answered in 10 seconds or less	98.9%	98.8%	98.8%	98.3%	99.0%
Percentage of offered calls transferred to an emergency service organisation	39.4%	42.3%	44.3%	52.0%	59.9%
Percentage of offered calls from mobile phones	62.8%	62.2%	62.1%	62.8%	62.9%

Source: Emergency call person (Telstra).

Calls identified by the ECP as being non-emergency calls are not connected to an emergency service organisation. Non-emergency can be attributed to misdials, automatically generated calls from incorrectly programmed fax machines or modems, callers reporting matters that are not emergencies, or hoax and malicious calls.

The most effective measure of reducing non-emergency calls to date has been Telstra's introduction of a short recorded announcement for the Triple Zero service. Since its introduction on 19 December 2008, the daily number of non-emergency calls to the emergency call service reaching an ECP has reduced by approximately 25 per cent, without any complaints or genuine calls known to have been affected.

Another measure the ACMA is continuing to monitor is the implementation by industry of an escalated warning process (introduced in July 2009) which can lead to telephone account suspension and cancellation in cases of persistent non-emergency calls.

Triple Zero Kids' Challenge

During the reporting period, a working group (comprising representatives of industry and emergency service organisations) reporting to the ACMA's Emergency Call Service Advisory Committee was active in developing initiatives aimed at improving awareness of Australia's emergency call service, particularly among children. The group commissioned the development of an online computer game, the Triple Zero Kids' Challenge, which aims to educate children aged between five and 10 about the emergency call service.

The Minister for Broadband, Communications and the Digital Economy (the Minister) launched the Triple Zero Kids' Challenge on 3 May 2010. In the week following the launch 17,000 children had logged on and played the game.

New emergency call service determination

In December 2009, the ACMA made amendments to the Determination which governs how telecommunications carriers and the ECP receive, handle and transfer emergency calls.

While core obligations from the previous determination largely remain, the new determination introduced a number of important improvements that take into account technological change, especially from increasing IP-based telephony. The key changes to the determination include:

- > new obligations on the providers of VoIP 'out only' services requiring them either to provide access to Triple Zero or, if they are unable to do so, to clearly inform their customers that such access is not available
- > revised customer information provisions to align obligations on mobile communication providers with those that already exist for other types of service providers
- > additional requirements aimed at minimising the number of non-emergency calls to Triple Zero and 112 from mobile phones, which take into account recent industry initiatives
- > making the call answering standards for the text (TTY) emergency call service number 106 compatible with the standards for voice calls.

The amended Determination follows an extensive review of the existing regulatory arrangements.

Enhanced mobile location for emergency service organisations

In May 2010, the ACMA released a paper entitled *Enhanced mobile location information for the emergency call service*. The paper centred on the ACMA's proposal to amend the rules to require mobile carriers to provide all location information available in association with a genuine emergency call on request to an emergency service organisation.

The ACMA's proposal follows its 2009 study into whether there is an appropriate and consistent mobile location solution for Australia's emergency call service that cost effectively meets demonstrated needs.

Submissions will be used to inform the drafting process of formal amendments to the Determination.

Emergency call service—106 text service

The provider of the National Relay Service (NRS), ACE, is the ECP for the text emergency service accessed using the 106 number. The 106 text emergency service provides access to emergency services for people who are deaf, hearing- or speech-impaired and who use a teletypewriter (TTY) or modem to access the NRS.

A total of 227 genuine calls were relayed to ESOs in 2009–10 compared with 333 in 2008–09. This decline may in part be due to the declining use of TTYs that has been documented over recent years and the increased use of the internet relay service. Type and read calls from TTYs remain the main source of genuine calls to 106. It is understood that a comparable number of calls may be related to the Triple Zero number annually from internet relay service and other NRS users.

The number of non-genuine calls to the 106 number has continued to reduce in 2009–10. In part, this may be attributed to ongoing network enhancements that automatically terminate calls with excess digits. The vast majority of these calls are inadvertent voice calls to 106 which are terminated before presentation to the 106 operator.

SMS access to the emergency call service for the deaf

In 2009, the ACMA conducted a study on the technical feasibility of providing the deaf and hearing/speech-impaired communities with SMS access to an emergency service. The ACMA initiated the feasibility study in response to representations from these communities.

A report discussing the issues surrounding the potential provision of an SMS emergency service to this target group was prepared for the Minister. On 20 April 2010, the Minister announced that the government will be introducing SMS access to the emergency call service for people who are deaf and hearing- or speech-impaired. Implementation arrangements are being developed by the Department of Broadband, Communications and the Digital Economy (DBCDE).

Integrated Public Number Database

When emergency calls are transferred to state and territory emergency service organisations, the service name and address information sourced from the IPND (see Role of the IPND in this chapter) is carried with the call. Access to address information improves emergency service response times, especially for calls made from fixed-line services.

Investigation into VoIP carriage service compliance with IPND requirements

As part of its IPND compliance program, the ACMA commenced an investigation in September 2009 into whether VoIP CSPs are complying with their obligations to provide accurate customer data to the IPND. The ACMA requested a sample of 350 records in total from the IPND Manager for 14 VoIP CSPs to ascertain whether the records contained in the IPND matched the customer records held by the providers. The selected VoIP providers included both the large and small end of the market.

In July 2010, following consideration of the results of the investigation and information provided by industry, the ACMA formally warned 11 of the 14 VoIP CSPs for not complying with their regulatory obligations. The ACMA will be undertaking a second round of audits in the 2010–11 reporting period.

Investigation into failure to provide complete address information to the IPND Manager

During the reporting period, the ACMA completed an investigation which concluded that Soul Communications Pty Ltd (Soul) had breached the *Telecommunications Act 1997* (the Act) by failing to provide the IPND Manager with the information reasonably required for a particular mobile service number. The investigation followed a report that a mobile service was used on 26 October 2008 to make several calls to Triple Zero concerning a fatal home invasion in Sydney.

Soul cooperated fully with the ACMA's investigation. Once aware of the data problem with the service address, Soul upgraded its data-checking processes and undertook a full data audit to check its IPND records. Soul also admitted to the then shortcomings in its systems and agreed, in a court enforceable undertaking, to make further improvements to its systems and processes.

The ACMA accepted the court enforceable undertaking from Soul. Measures in Soul's undertaking include periodic full audits of its records, instigation of a comprehensive training and education process for its staff, regular reconciliations between its records and those held in the IPND and comprehensive reporting to the ACMA.

Telecommunications privacy provisions

The *Privacy Act 1988* (the Privacy Act) sets out a national scheme governing the collection, storage, use and disclosure of personal information by private sector organisations. The Privacy Act seeks to balance privacy protection against competing social interests such as facilitating the free flow of information and the right of business to operate efficiently.

The ACMA administers regulatory obligations that interact with the Privacy Act, including:

- > the *Telecommunications Act 1997*—Part 13 provides for the confidentiality of personal information and the contents of communications, including restrictions on how telecommunications carriers and CSPs may use and disclose personal information
- > the *Spam Act 2003*—establishes a scheme for regulating commercial email and other electronic messages.

Under Part 6 of the Act, the ACMA has registered industry codes addressing privacy issues such as the handling of personal information in the IPND and in e-marketing.

The Attorney-General's Department administers the *Telecommunications (Interception and Access) Act 1979* (the TIA Act) which prohibits the interception of telecommunications except as conducted in accordance with the TIA Act. The obligations placed on carriers and CSPs by the TIA Act include the provision of assistance to law enforcement agencies and facilitating lawful interception.

Disclosure of customer information

Customer information provided to telecommunications carriers and CSPs is protected under Part 13 of the Act. Carriers and CSPs are prohibited from disclosing that information to other parties except in certain limited and restricted circumstances. Those circumstances generally relate to:

- > assisting in investigations by law enforcement or national security agencies, the ACMA, the Australian Competition and Consumer Commission (ACCC) or the Telecommunications Industry Ombudsman (TIO)
- > where there is an imminent threat to a person's life or health
- > satisfying the business needs of other carriers and CSPs.

There were 305,154 disclosures that were made under Part 13 of the Act during 2009–10 by CSPs and carriers compared with 332,774 disclosures made during 2008–09, a decline of 8.3 per cent. The number and type of disclosures made during 2009–10, as reported to the ACMA under section 308 of the Act, are provided in Table 2.4.

Table 2.4 Disclosures made under Part 13 (Section 308) of the *Telecommunications Act 1997*

Reason for disclosure	(Sub) section of the Act	Number of disclosures				
		2005–06	2006–07	2007–08	2008–09	2009–10
Authorised by or under law	280	13,634	21,532	9,932	8,662	5,898
Made as a witness under summons	281	69	74	46	333	538
For the enforcement of criminal law—not certified	282(1) (repealed)	396,430	375,443	16,099	—	—
For the enforcement of law imposing pecuniary penalty or protection of public revenue—not certified	282(2) (repealed)	14,240	43,981	4,849	—	—
For the enforcement of criminal law—certified	282(3) (repealed)	285,206	418,801	243,544	—	—
For the enforcement of law imposing pecuniary penalty or protection of public revenue—certified	282(4) (repealed)	1,530	1,359	17,287	—	—
To protect public revenue—certified	282(5) (repealed)	89,325	5,365	2,678	—	—
To assist the ACA/ACMA	284(1)	13	10	939	2,074	3,003
To assist the ACCC	284(2)	187	1	71	29	3
To assist the TIO	284(3)	5,877	5,150	8,858	14,590	16,687
Calls to emergency service number	286	—	—	—	—	41
To avert a threat to a person's life or health	287	4,085	3,980	4,489	5,333	7,350
Communications for maritime purposes	288	1	—	—	3	1

With the knowledge or consent of the person concerned	289	133,765	289,621	305,068	301,747	271,631
In circumstances prescribed in the Telecommunications Regulations 2001	292	5	1	13	3	1
Connected with an exempt disclosure	293	–	–	–	0	1
Total		944,367	1,165,318	613,873	332,774	305,154

Note: Certified disclosures authorise the disclosure of documents or customer information where an enforcement agency has certified in writing that the disclosure is required. Uncertified disclosures will usually involve an informal request by an enforcement agency for the disclosure of documents or customer information. Such requests do not involve a certificate but are accompanied by supporting information.

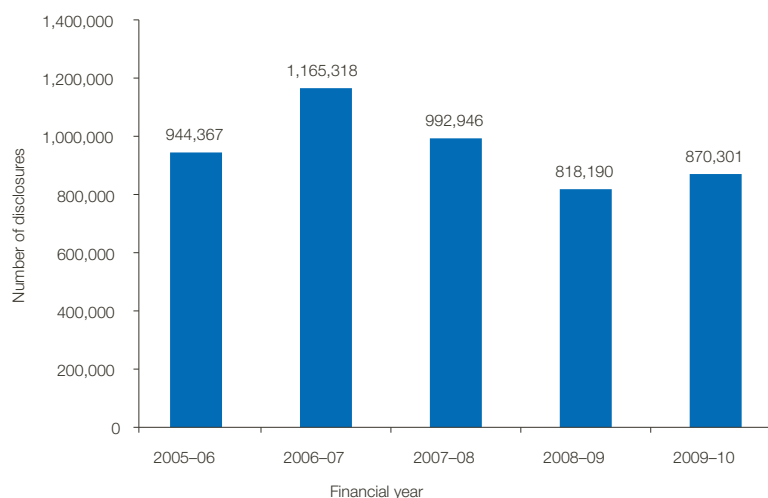
Note: Following the Report of the Review of the Regulation of Access to Communications, legislative amendments were made in September 2007 to transfer a range of provisions, including those for access to telecommunications data, from the Act to the TIA Act. The amendments came into effect in November 2007 with the repeal of section 282 of the Act and the commencement of new provisions in the TIA Act (sections 177, 178, 179 and 180).

Source: Carriers.

Additionally, 565,147 disclosures were made under the TIA Act for existing and prospective information to assist law enforcement agencies under sections 177 to 180 in the TIA Act in 2009–10, compared with 485,416 disclosures made during 2008–09, an increase of 16.4 per cent.

Figure 2.1 shows the number of disclosures of customer information under the Act and the TIA Act between 2005–06 and 2009–10. Care should be taken in drawing conclusions from comparing these numbers, as legislative amendments were made in September 2007 to provisions authorising access to telecommunications data. The amendments came into effect in November 2007 and included the repeal of section 282 of the Act and the commencement of new provisions in the TIA Act (sections 177, 178, 179 and 180).

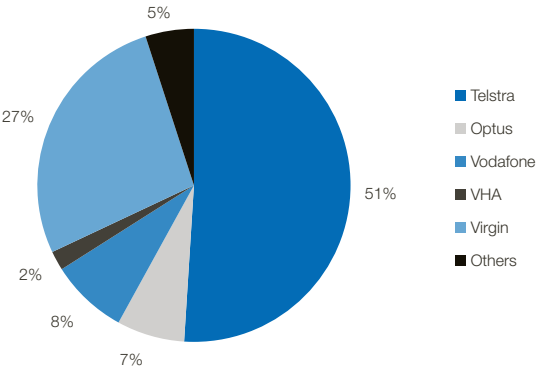
Figure 2.1 Disclosure of customer information under the Telecommunications Act and the TIA Act



Source: Carriers and CSPs.

Telstra makes more disclosures than the other carriers; both because of its market share and its role as the IPND Manager (see Figure 2.2).

Figure 2.2 Disclosures of customer information by carrier



Source: Carriers.

Interception

The content of communications between users of telecommunications services is strictly protected in Australia as one of the most crucial areas of privacy protection. Lawful interception may only be provided to law enforcement and national security agencies in accordance with a warrant under the TIA Act. Interception for other purposes is prohibited, with criminal penalties for breaches.

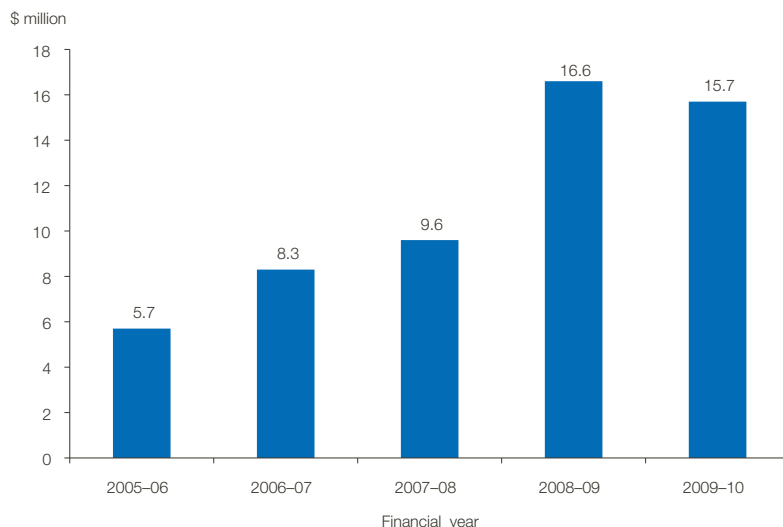
Cost of providing assistance

Chapter 5 of the TIA Act obliges carriers and CSPs to ensure that their networks, facilities and carriage services are capable of enabling communications to be intercepted upon presentation of an interception warrant. This obligation includes a requirement to develop, install and maintain an interception capability.

Section 314 of the Act sets out the terms and conditions under which carriers and CSPs are required to provide help to an agency. The telecommunications industry is generally permitted to recover from enforcement agencies the cost of providing assistance on the basis that it neither profits from, nor bears the costs of, giving that help. However, the industry is responsible for the costs associated with providing interception capability in their representative networks.

In 2009–10, the cost to industry of providing interception was \$15,670,689 (Figure 2.3). This represents a decrease of \$952,681 or six per cent, in comparison to the 2008–09 cost. Telstra accounted for the majority of the cost.

Figure 2.3 Cost of providing interception capabilities



Source: The ACMA annual industry data request.

Interception capability plan compliance

Under section 196 of the TIA Act, carriers and nominated CSPs must lodge an interception capability plan by 1 July each year with the Communications Access Co-ordinator in the Attorney-General's Department. The ACMA's role is to enforce this obligation. Compliance with this obligation was satisfactory in 2009–10 although several carriers submitted their plans after the due date.

During the reporting period, the Attorney-General's Department referred 38 carriers and nominated CSPs to the ACMA for enforcement action. Of these, 35 have subsequently complied with their obligations and three have surrendered their carrier licences.

Role of the Integrated Public Number Database

The IPND is an industry-wide database of all listed and unlisted telephone numbers and associated customer information, including customer name and address information, and the name of each customer's CSP. Under its carrier licence conditions, the IPND Manager is Telstra.

Telstra reported that the IPND contained 56.7 million connected records at 30 June 2010, an increase of six per cent on the 53.7 million records held one year previously. At 30 June 2010, 75 organisations were listed as data providers to the IPND on behalf of CSPs, compared with 46 at the end of the previous year.

The ACMA conducted its fourth audit of IPND address data during the 2009–10 reporting period. The purpose of the 2009–10 audit was to measure the quality of address data stored in the IPND in order to compare the results to previous audits and track whether there has been improvement. The 2009–10 audit revealed that 95.5 per cent of the address records in the IPND are regarded as having high or good useability for the purpose of efficient dispatch of emergency response. This is up from 89.2 per cent in the previous audit in 2006.

Following each IPND audit, IPND data providers are requested to correct any identified systemic errors, identify any sources of errors and implement an action plan.

The ACMA will continue to work with data providers to make further corrections and/or implement system improvements where necessary. The ACMA will consider at a later time whether to conduct another audit.

Handling of Life Threatening and Unwelcome Communications Industry Code

The C525:2006 *Handling of Life Threatening and Unwelcome Calls* Industry Code sets out obligations on carriers, CSPs and the NRS Provider in responding to requests from customers and police to resolve life threatening situations and unwelcome communications.

During the reporting period, the TIO confirmed one code breach from 1,040 complaint issues,¹ which represented 0.4 per cent of all complaint issues recorded by the TIO during this period.

Following a review of the code in April 2010, Communications Alliance submitted the C525:2010 *Handling of Life Threatening and Unwelcome Communications* Industry Code to the ACMA for registration. The ACMA contributed to the review of the industry code which resulted in new provisions to enable better industry management of unwelcome communications to the emergency call service. The code was subsequently registered by the ACMA on 22 July 2010.

Submarine cable protection

Submarine cables carry most of Australia's international voice and data traffic and thus contribute significantly to the Australian economy. In 2009–10, new activity in this sector was limited, with no new cable installation permits being granted or submarine cable protection zones being considered.

At present there are nine submarine cables connecting Australia to seven countries: Fiji, Guam, Indonesia, New Caledonia, New Zealand, Papua New Guinea and the United States. Recently some parties considering laying new submarine cables have approached the ACMA, signalling a possible upswing in permit applications and an expansion of cable capacity into Australia in 2010–11.

In 2010, the ACMA received 18 submissions from industry in response to the *Submarine cable regulation* discussion paper. The ACMA will consider these submissions and submit a report to the Minister in 2010–11. The ACMA was required to undertake the review under clause 89(1) of Schedule 3A to the Act to consider the operation of the submarine cable protection regime.

Current submarine cable protection zones

Schedule 3A to the Act permits the ACMA to declare protection zones over nationally significant cables and to prohibit or restrict activities that pose a risk of damaging cables in these zones. Australia currently has three submarine cable protection zones; two off the Sydney coast and one off the Perth coast. No new submarine cable protection zones were considered during 2009–10.

New cable activities

No permit applications for new cables were received in 2009–10.

Radiofrequency interference complaints

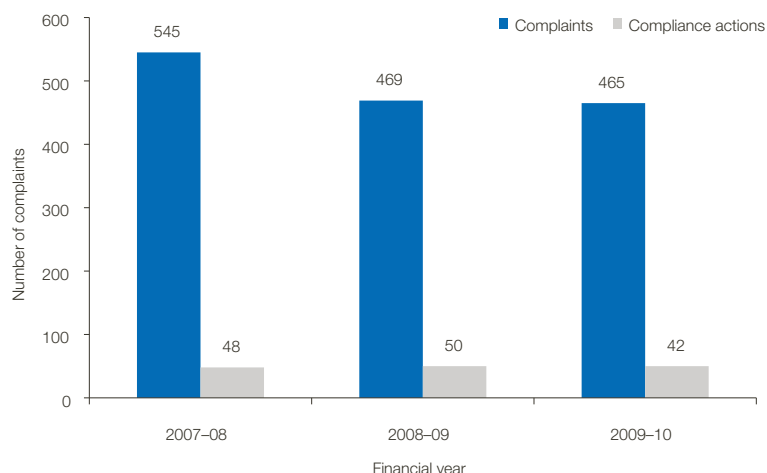
The ACMA investigates complaints about radiofrequency interference to radiocommunications equipment. Interference is classified as either domestic systems interference or radio communications interference.

Domestic systems interference

Domestic systems interference (DSI) refers to interference to the reception of radio or television broadcasting, usually in domestic premises. It also encompasses audio interference caused by nearby radio transmitters, such as those used by citizen band or amateur radio operators, or from other radio services with a transmitter located nearby.

During 2009–10, complaints of domestic systems interference to terrestrial analog television services continued to outnumber complaints of interference to other broadcasting services. However, the total number of analog television complaints has decreased this year, with a corresponding increase in the number of complaints about digital television reception (Figure 2.4). This trend is expected to continue until the end of 2013 when the switchover from analog television transmission to digital only transmission will be complete. Masthead and distribution amplifiers (associated with television antenna installations) and household equipment (excluding computers) continue to be the major contributing sources of DSI. The overall number of DSI complaints is only slightly lower than the number for the previous reporting period (Figure 2.4). Only a small number (42) required any ACMA compliance action.

Figure 2.4 Domestic systems interference complaints and compliance actions



Source: Domestic system interference complaints to the ACMA.

The following tables are prepared from information collected for each interference investigation activity according to standardised terminology and events.

Table 2.5 Domestic systems interference—Number of affected services, 2009–10

Activity	Households affected
Domestic systems interference	1,795
Type of affected service	
Terrestrial digital radio	11
Terrestrial analog radio	128
Terrestrial analog television	182
Terrestrial digital television	280
Total	601

Note: One ACMA compliance activity may involve a complaint to the ACMA on behalf of a number of affected households in a neighbourhood or involve several types of broadcasting services.

Source: Domestic system interference complaints to the ACMA.

Table 2.6 Domestic systems interference—Sources of interference

Type of affected service	Services affected
Transmitter—unlicensed	1
Transmitter—spectrum licence	1
Industrial/scientific/medical equipment	1
Industrial equipment	6
Transmitter—class licence	9
Pulsed devices	9
Computer equipment	12
Lighting devices	12
Site infrastructure excluding Tx/Rx equipment	13
Transmitter—apparatus licence	16
No source—the ACMA provided advice only	27
Receiver	36
Masthead/distribution amplifier	40
Household equipment excluding computers	66
Electrical infrastructure	67
Unknown	149
Total	465

Note: Tx is an abbreviation for transmit of transmitter. Rx is an abbreviation for receive or receiver.

Source: Domestic system interference complaints to the ACMA.

Table 2.7 Domestic systems interference complaints—Interference cause and remedies

Interference cause	ACMA field activities
Overpowered operation	1
Incorrect emission	1
Intermodal/desense/image*	4
Foreign signal	4
Transmitter faulty	6
Receiver faulty	6
Faulty amplifier	10
Faulty installation	13
Propagation peculiarities	18
Receiver antenna faulty	21
No source data—provided advice only	27
Defective equipment—non-radiating	29
Inadequate signal level	56
Powerline electrical interference	62
Defective equipment—radiating	77
Other [†]	130
Total	465
Interference remedies	ACMA field activities
Level of protection (LOP) achieved	1
Tx unintended emissions suppressed	2
Receiver selectivity to be improved	3

No protection afforded	9
Defective equipment rectified	13
No economic cure [†]	21
Provided advice only	27
Improve site engineering	44
Interference ceased without identification	48
Use of offending equipment discontinued	53
Referred to electrical supply authority	55
Other [†]	72
Service recommended	117
Total	465

* The terms 'intermodal/desense/image' are used to explain the interference effects that occur when the technical performance of receiving equipment is compromised.

† 'Other' includes cases where the interference cause is unknown (not identifiable) or there are several causes of interference.

‡ The repair cost outweighs the cost of replacing the receiving equipment.

Source: Domestic system interference complaints to the ACMA.

Table 2.8 Identified contraventions of the Radiocommunications Act and subsequent ACMA enforcement action for domestic systems interference complaints

Type of compliance enforcement action	Number of contraventions	Section of Radiocommunications Act 1992	Section description
Advice notice (RF 169)	37	197	Causing interference
	1	113	Contravention of conditions
Subtotal	38		
Warning notice (RF 168)	3	197	Causing interference
	1	46	Unlicensed operation of radiocommunications devices
Subtotal	4		
Total	42		

Source: The ACMA.

Radiocommunications interference

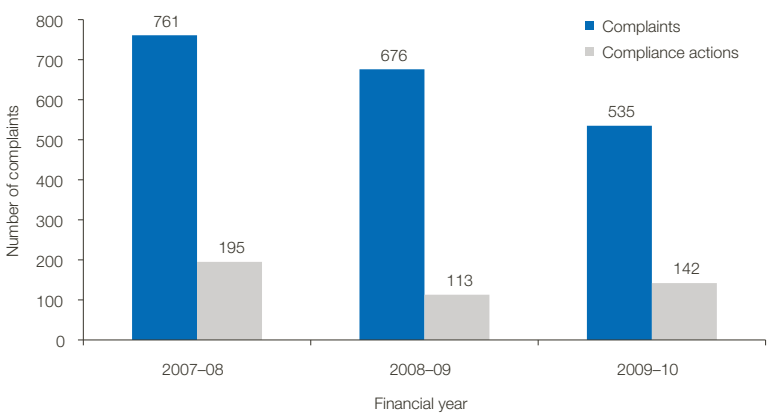
Radiocommunications interference (RCI) is interference affecting a radiocommunications receiver used for non-broadcasting purposes such as public-safety, commercial and recreational services.

During 2009–10, mobile telephone services continued to be more affected by interference than any other type of service. However, complaints of interference to GSM mobile services decreased notably since last period.

The number of complaints of radiocommunications interference decreased compared to the previous reporting period by 21 per cent (Figure 2.5). Radiocommunication transmitters continue to be the significant source of interference (Table 2.10).

During the reporting period, there was an increase in compliance actions (142) involving the issue of advice and warning notices. This approach was effective and further escalation was not necessary. Consequently, no prosecutions relating to radiocommunications interference were initiated during the reporting period.

Figure 2.5 Radiocommunications interference complaints and compliance actions



Source: The ACMA.

The following tables are prepared from information collected for each interference investigation activity according to standardised terminology and events.

Table 2.9 Radiocommunications interference—Types of service affected

Type of affected service	Number of ACMA compliance activities
Broadband wireless access service	1
Class licensed or non-assigned apparatus licensed devices*	23
Emergency position indicating radio beacon (EPIRB)	30
Public protection	35
Amateur	35
GSM mobile	41
3G mobile (other than 800 MHz)	44
Telstra Next G (3G 800MHz)	126
General	200
Total	535

Note: Each complaint has only one type of affected service.

* Such as devices authorised under the LIPD and Maritime Ship Station class licences or non-assigned apparatus licences (other than Amateur licences).

Source: Radiocommunications interference complaints to the ACMA.

Table 2.10 Radiocommunications interference—Sources of interference

Interference source	Number of ACMA compliance activities
Transmitter-foreign vessel	1
Site infrastructure excluding Tx/Rx equipment	10
Transmitter-foreign country	11
Transmitter—spectrum licence	14
Differential global positioning systems (DGPS)*	14
Receiver	17
Transmitter—unlicensed	46
Transmitter—class licence	71
Transmitter—apparatus licence	98
Subtotal related to communications devices	282
Computer equipment	2
Pulsed devices	2
Industrial equipment	2
Industrial/scientific/medical equipment	4
Electrical infrastructure	9
Lighting devices	17
Household equipment excluding computers	18
Masthead/distribution amplifier	44
Unknown	155
Subtotal related to non-communications devices	253
Total	535

Note: Tx is an abbreviation for transmit or transmitter. Rx is an abbreviation for receive or receiver.

** Terrestrial DGPS transmitters are used by GPS receivers to increase positioning accuracy.*

Source: Radiocommunications interference complaints to the ACMA.

Table 2.11 Radiocommunications interference complaints—Interference cause and remedy

Interference cause	ACMA compliance activities
Excessive emission bandwidth caused by over-modulation	1
Overpowered operation	3
Errors in frequency coordination process	3
Transmitter antenna faulty	3
Receiver antenna faulty	4
Inadequate signal level	5
Receiver faulty	5
Propagation peculiarities	8
Powerline electrical interference	11
Defective equipment—non radiating	14
Incorrect emission	15
Installation faulty	15
Intermod/desense/image*	20
Amplifier faulty	21
Foreign signal	28
Transmitter faulty	39
Defective equipment—radiating	64
Unlicensed operation	73
Other†	203
Total	535
Interference remedy advised to client	ACMA compliance activities
Level of Protection not achieved, out of band interference resolved	1
Level of Protection not achieved, in band interference resolved	1
No economical cure‡	2
Receiver selectivity to be improved	6
Referred to electrical supply authority	11
No protection afforded	11
Defective equipment rectified	21
Tx unintended emissions suppressed	22
Improve site engineering	31
Service recommended	80
Interference ceased without identification	99
Other†	102
Use of offending equipment discontinued	148
Total	535

Note: Tx is an abbreviation for transmit or transmitter. Rx is an abbreviation for receive or receiver.

*The terms 'intermodal/desense/image' are used to explain the interference effects that occur when the technical performance of receiving equipment is compromised.

†'Other' includes cases where the interference cause is unknown (not identifiable) or there are several causes of interference.

‡The repair cost outweighs the cost of replacing the receiving equipment.

Source: Radiocommunications complaints to the ACMA.

Table 2.12 Identified contraventions of the Act and subsequent ACMA enforcement action for radiocommunications interference complaints

Type of compliance enforcement action	Number of contraventions	Section of <i>Radiocommunications Act 1992</i>	Section description
Advice notice (RF 169)	1	192	Interference likely to prejudice safe operation of vessels, aircraft or space objects
	1	189	Operation etc. of prohibited devices
	1	411	Connection of customer equipment or customer cabling—breach of section 376 standards
	3	194	Interference likely to endanger safety or cause loss or damage
	4	113	Contravention of conditions
	11	46	Unlicensed operation of radiocommunication devices
	75	197	Causing interference
Warning notice (RF 168)	1	160	Supply of non-standard devices
	1	194	Interference likely to endanger safety or cause loss or damage
	5	113	Contravention of conditions
	16	46	Unlicensed operation of radiocommunication devices
	23	197	Causing interference
Total	142		

Endnotes

¹ One complaint may be made up of many 'complaint issues'.

Chapter 3

Telecommunications consumer safeguards and quality of service

Overview

Chapter 3 provides information about the telecommunications industry's performance in 2009–10 against consumer safeguards and regulated quality of service measures. Key developments in 2009–10 include:

- > alternative communications, such as mobiles and internet, impacting retention and use of regulated services, as evidenced by:
 - decline in the number of fixed-line standard telephone services covered by the Customer Service Guarantee Standard (CSG Standard)
 - growth in the volume of internet relay call minutes relating to the National Relay Service (NRS)
- > improvement in carriage service provider performance in meeting CSG Standard timeframes for new service connections and fault repairs
- > continued decline in the number of payphones in operation
- > significant increase in the number of mobile phone numbers ported
- > more citizens utilising the services of the Do Not Call Register (DNCR)
- > small increase in overall complaints to the Telecommunications Industry Ombudsman (TIO)
- > decline in the number of complaints to the TIO relating to fixed-line telephone and mobile premium services, while complaints relating to internet and mobile telephone services have increased.

Chapter summary

The universal service obligation (USO) is the consumer safeguard that ensures all Australians have reasonable access to a standard telephone service, payphones and prescribed carriage services on an equitable basis. The USO subsidy was approximately \$145 million in 2009–10, the same as 2008–09.

The reported number of telephone services covered by the CSG Standard decreased by 1.8 per cent to 7.36 million services in 2009–10. CSG Standard telephone services accounted for 69 per cent of all fixed-line telephone services in operation in Australia at June 2010.

The main four carriage service providers (CSPs) met CSG Standard timeframes for new service connections between 89.4 per cent (AAPT) and 98.8 per cent (Primus) of the time during 2009–10, compared with 88.3 per cent (Telstra) and 95.9 per cent (Optus) during 2008–09. The same CSPs repaired between 93.4 per cent (Telstra) and 97.3 per cent (AAPT) of all faults within CSG Standard timeframes, compared with 90.5 per cent (Telstra) and 92.1 per cent (AAPT) during 2008–09.

There were a total of 3.16 million call minutes to the NRS during 2009–10 compared with 3.25 million in 2008–09, a decrease of 2.8 per cent. Internet relay call minutes accounted for 36 per cent of total call minutes during 2009–10, compared with 27.5 per cent in 2008–09.

The number of local numbers ported decreased by 26 per cent during 2009–10, with 615,860 local numbers ported compared with 832,218 during 2008–09. In contrast, the number of mobile number ports increased by 23 per cent, with 1.66 million ports occurring during 2009–10, compared with 1.35 million in 2008–09.

The number of payphones in operation in Australia, whether operated by Telstra or other organisations, decreased by 11 per cent or 4,316 payphones during the 2009–10 reporting period. At 30 June 2010, there were 35,012 payphones in operation, compared with 39,328 at 30 June 2009. Telstra payphones were serviceable between 94 per cent and 96 per cent of the time on a quarterly basis during 2009–10.

There were approximately 64,587 registered cablers in Australia at 30 June 2010, an increase of four per cent since 30 June 2009.

At June 2010, 5.04 million telephone numbers were listed on the DNCR, with 1.49 million telephone numbers added to the DNCR during 2009–10, an increase of 42 per cent. During the same period, 11,229 complaints were received concerning unsolicited telemarketing calls, compared with 10,644 in 2008–09. Of the complaints received during 2009–10, 9,308 raised potential breaches of the *Do Not Call Register Act 2006* (DNCR Act) and/or the Telemarketing Industry Standard, compared with 9,036 in the 2008–09.

The ACMA received 3,017 complaints concerning spam during 2009–10, compared with 3,947 complaints received in 2008–09.

During 2009–10, there were 1,023 complaints to the TIO relating to facility installation complaints, compared with 1,111 received by the TIO during 2008–09.

The TIO received 485,471 complaint issues during 2009–10, compared with 481,418 in 2008–09, an increase of less than one per cent. The total number of complaint issues received concerning mobile and internet services increased by 18 per cent and seven per cent respectively during 2009–10, while complaint issues relating to fixed-line and mobile premium services declined by 11 per cent and 66 per cent respectively.

Survey data shows that during 2009–10, 65 per cent of fixed-line voice users in Australia believed that their local call provider either exceeded or mostly met their expectations, compared with 56 per cent for national call providers. This compared with 65 per cent recorded for mobile service providers and 61 per cent for internet service providers. This has remained relatively unchanged during the past five reporting periods. Across all the main service types, between 10 and 30 per cent of respondents were unable to say (did not know) whether or not their service provider had met their expectations.

Table 3.1 Key industry statistics

	2008–09	2009–10
Universal service obligation subsidy	\$145 million	\$145 million
Number of public payphones (Telstra-operated and privately owned)*	39,328	35,012
Number of telephone services covered by the Customer Service Guarantee Standard*	7.49 million	7.36 million
Call minutes to the National Relay Service	3.25 million	3.16 million
Local geographic numbers ported	832,218	615,860
Mobile numbers ported	1.35 million	1.66 million
Number of registered cablers*	61,904	64,587
Number of telephone numbers registered on the Do Not Call Register*	3.54 million	5.04 million
Number of complaints concerning breaches of the <i>Do Not Call Register Act 2006</i>	10,644	11,229
Number of complaints concerning spam	3,947	3,017
Number of complaint issues received by the TIO	481,418	485,471
Facility installation complaints/enquiries		
Number of complaints to the TIO	1,111	1,023
Number of complaints/enquiries to the ACMA	46	138

*As at 30 June.

Universal service obligation

The universal service obligation (USO) is a safeguard for consumers, ensuring that all people in Australia, wherever they live or conduct their business, have reasonable access on an equitable basis to a standard telephone service, payphones and prescribed carriage services. The term USO is defined in section 9 of the *Telecommunication (Consumer Protection and Service Standards) Act 1999* (the TCPSS Act). No carriage services have been prescribed to date.

USO levies and payments

All licensed telecommunications carriers in Australia are required to make a proportionate contribution based on eligible revenue towards the cost of providing the USO. The Minister for Broadband, Communications and the Digital Economy (the Minister) determines the amount of the subsidy for supplying the USO, following consideration of advice from the ACMA. In 2009–10, the subsidy was approximately \$145 million, the same as 2008–09.

The concept of 'eligible revenue' is used by the ACMA to determine each carrier's contribution to the cost of providing the USO (their USO levy). Eligible revenue is the revenue earned by a carrier and its related parties from operations in the Australian telecommunications industry, less certain deductions. For most carriers, the contribution to subsidising the universal service provider (USP) is calculated according to each carrier's eligible revenue, divided by the total eligible revenue of all carriers and multiplied by the amount of the USP entitlement plus any previous years' shortfall in USO levies collected. This calculation is also applied to assess the levy debit applicable to the USP. This levy debit is subtracted from the amount of subsidy determined by the Minister to ensure that the USP also pays its share of the cost of fulfilling the USO. The contribution of each carrier that is in receivership, liquidation or deregistered to subsidising the USP is calculated according to the carrier's share of the total eligible revenue of all carriers, multiplied by the amount of the USP entitlement.

Telstra, as USP, was assessed by the ACMA as being entitled to a levy credit of \$145,076,237 for the 2009–10 claim year.

Table 3.2 sets out the eight largest USO liabilities and entitlements for 2009–10, based on eligible revenue for 2008–09. Of 194 carriers, 41 were assessed as having nil eligible revenue for 2009–10 and were not required to contribute to the costs incurred. The levies for the remaining carriers (other than those listed in Table 3.2) ranged from \$2.76 to \$966,205.92.

Table 3.2 Liabilities and entitlements for the eight largest participating carriers, 2009–10

	Total cost claims (\$)	Levy debit (\$)	Levy payable (\$)	Levy receivable (\$)
Telstra				
Telstra Corp.	\$145,076,237.00	\$89,852,726.88		\$55,223,510.12
Telstra Multimedia		\$1,686,574.98	\$1,686,574.98	
Optus				
Optus Mobile		\$18,543,198.21	\$18,543,198.21	
Optus Networks		\$10,321,658.15	\$10,321,658.15	
Vodafone Australia		\$9,025,572.11	\$9,025,572.11	
Vodafone Hutchison Australia		\$5,054,480.71	\$5,054,480.71	
AAPT		\$2,000,340.41	\$2,000,340.41	
Soul Pattinson		\$1,037,397.84	\$1,037,397.84	

Source: The ACMA.

Public payphones

Payphone services in Australia are provided either as part of the USO to ensure that everyone, no matter where they live or conduct their business, has reasonable access on an equitable basis to a payphone on a commercial basis. Telstra is the current USP for payphones. The ACMA monitors Telstra's performance and also receives information about the number of payphones supplied or operated on a commercial basis by other providers.

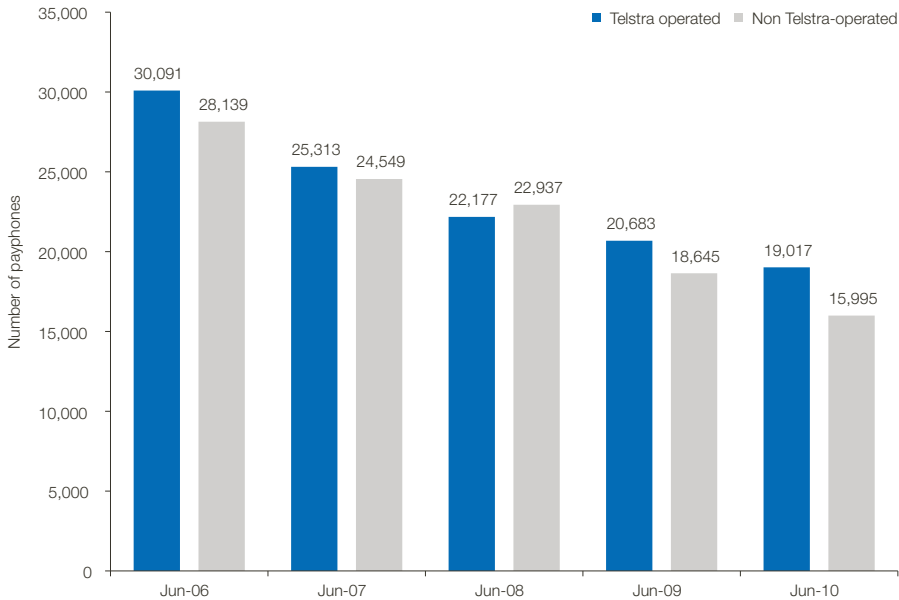
Numbers of payphones and payphone sites

The total number of payphones (both Telstra-operated and privately operated) in Australia fell by 11 per cent from 39,328 to 35,012 payphones during 2009–10. This included a net decrease of 8.1 per cent, from 20,683 to 19,017 in the number of Telstra-operated payphones and a decrease of 8.3 per cent from 16,838 to 15,441 in the number of Telstra-operated payphone sites (some sites have more than one payphone). There was also a decrease of 14.2 per cent, from 18,645 to 15,995, in the number of privately-operated payphones in 2009–10.

At 30 June 2010, 54.3 per cent of payphones were operated by Telstra. The remaining payphones were provided by other telecommunications companies, such as TriTel Australia Pty Ltd (the second largest provider of payphones), or other businesses, such as hotels, clubs and convenience stores. TriTel Australia owned and operated 835 payphones in 2009–10, of which 95.9 per cent (801) were located in urban areas.

The overall reduction in the number of payphones since 2005–06 is shown in Figure 3.1.

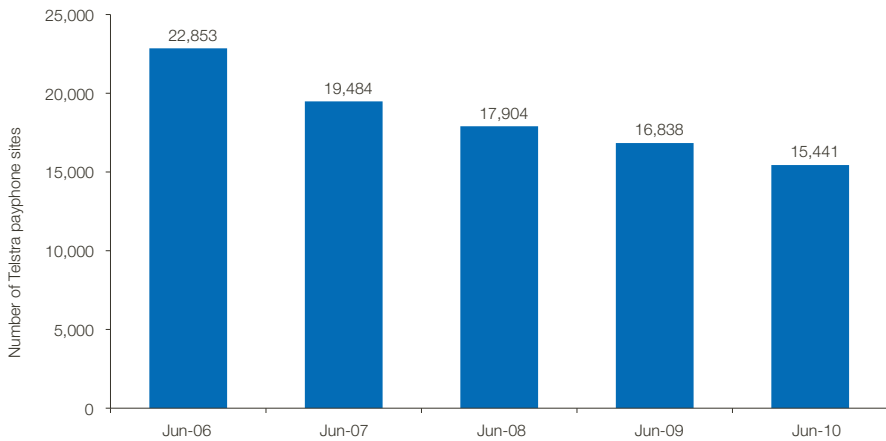
Figure 3.1 Number of payphones in operation



Source: Telstra and TriTel.

The overall reduction in the number of Telstra’s payphone sites with one or more payphones is shown in Figure 3.2.

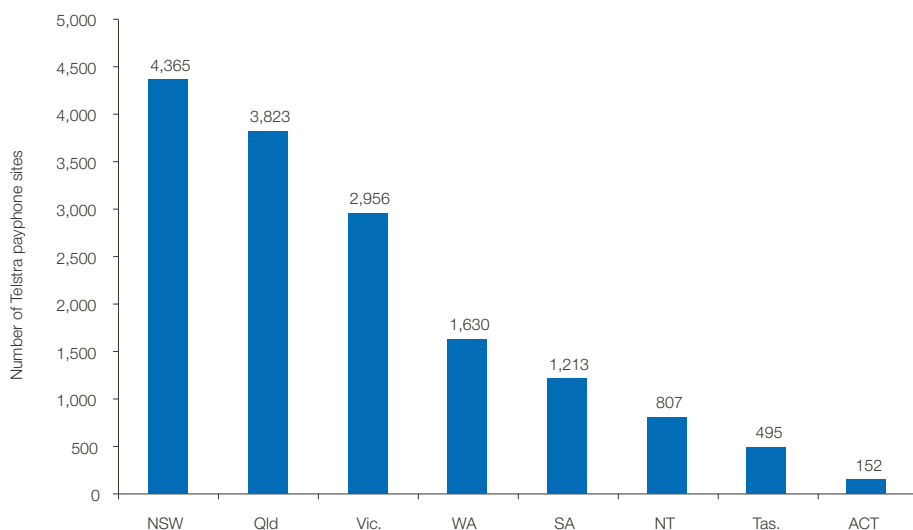
Figure 3.2 Number of Telstra payphone sites



Source: Telstra.

The number of Telstra payphone sites in each state and territory, as at 30 June 2010, is shown in Figure 3.3. Telstra’s website contains a payphone locator where consumers can find the location of their nearest payphone.¹

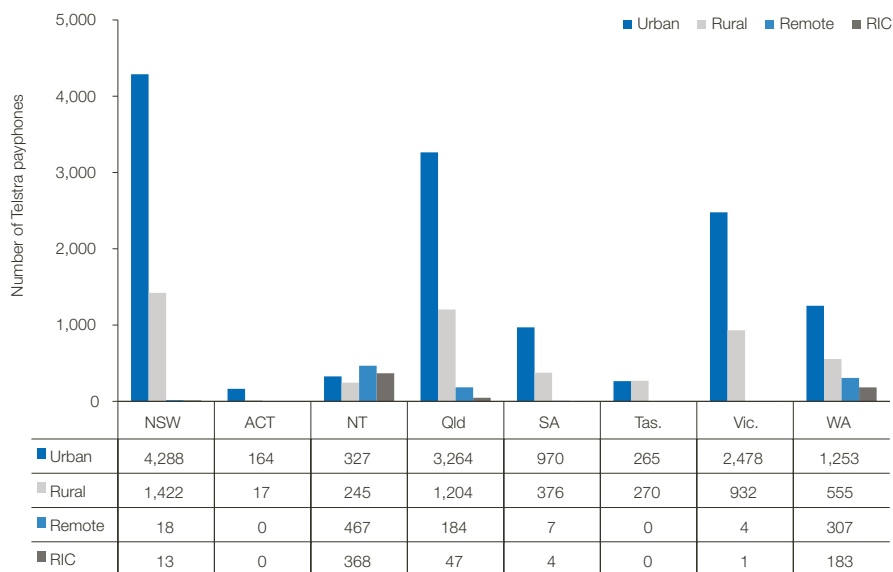
Figure 3.3 Telstra payphone sites by state and territory, 30 June 2010



Source: Telstra.

The total distribution of Telstra payphones by geographical category as at June 2010 was: urban 13,009; rural 5,021; and remote 987 (which includes 616 in remote Indigenous communities (RIC)). Figure 3.4 shows the distribution of Telstra payphones by geographical category on a state-by-state basis.

Figure 3.4 Distribution of Telstra payphones by geographic category, 2009–10



Note: RIC is a subset of remote.

Note: Urban is defined as communities with 10,000 or more people; rural is defined as communities with between 200 and 10,000 people; remote is defined as communities with up to 200 people.

Source: Telstra.

In addition to Telstra-operated payphones, there are 12,539 payphones operated by other companies in urban areas, 2,987 in rural areas and 469 in remote areas (299 of these in RIC).

Payphone serviceability

Telstra determines a payphone to be unserviceable if, as a result of a fault, it is not possible to make all types of calls using all payment mechanisms offered at that payphone. In 2009–10, Telstra payphones were serviceable between 96 per cent (September quarter of 2009) and 94 per cent of the time (March quarter of 2010).

Fault repair performance targets

Timely repair of payphone faults is an important component of the provision of payphone services under the USO. From notification of a fault, Telstra is required to use ‘reasonable endeavours’ to repair its unworkable payphones, according to the location of service within the following timeframes:

- > urban areas—one working day
- > rural areas—two working days
- > remote areas including RIC—three working days.

Telstra's payphone fault repair performance

During 2009–10, Telstra's national performance in repairing payphone faults on time was as follows:

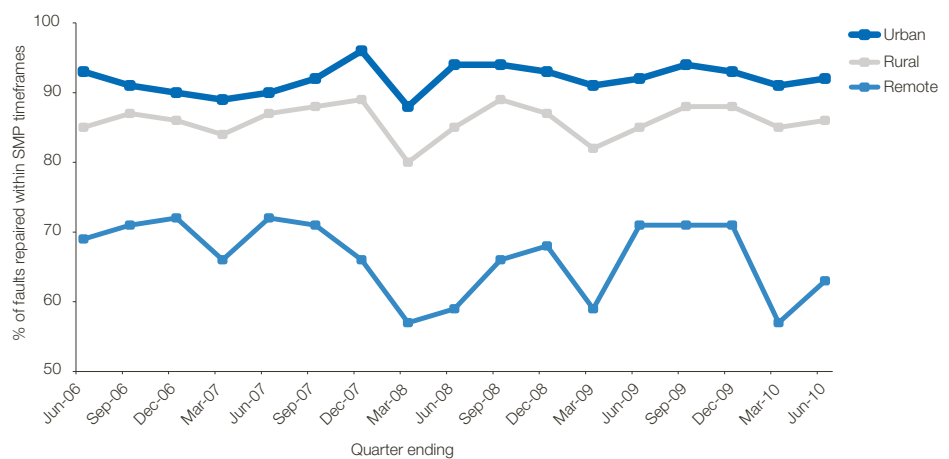
- > urban areas—92.6 per cent of repairs
- > rural areas—87 per cent of repairs
- > remote areas (including RIC)—65.4 per cent of repairs
- > RIC—57.9 per cent of repairs.

Telstra's overall performance in repairing faults within no more than five working days after the target dates was as follows:

- > urban areas— 99 per cent of repairs
- > rural areas—96.8 per cent of repairs
- > remote areas (including RIC)—85.7 per cent of repairs
- > RIC—81.2 per cent of repairs.

Figure 3.5 shows Telstra's payphone fault repair quarterly performance.

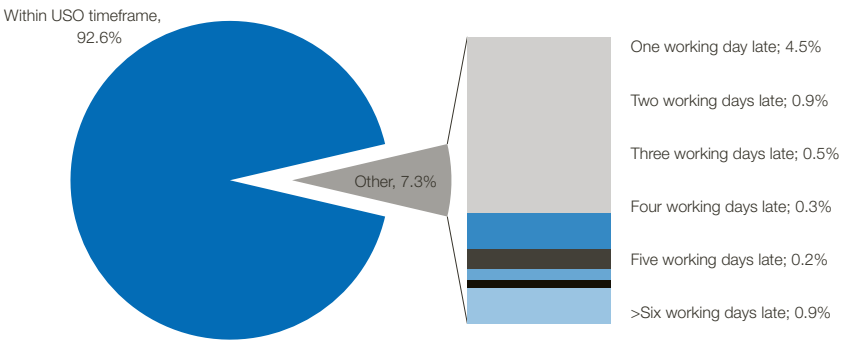
Figure 3.5 Telstra payphone fault repair quarterly performance—Percentage completed on time



Source: Telstra.

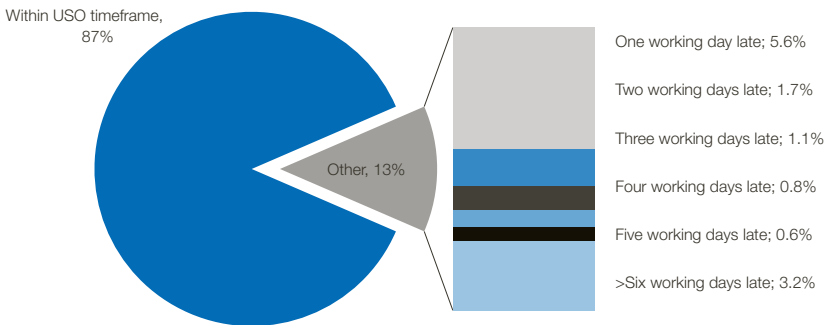
Figures 3.6, 3.7, and 3.8 provide the timeframe distributions for fault repairs completed for urban, rural and remote services.

Figure 3.6 Telstra payphone fault repair timeliness in urban areas, 2009–10



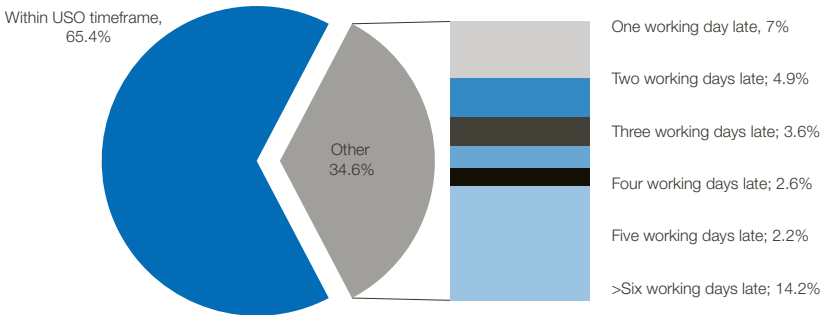
Note: Prescribed timeframe for repair in urban areas is one working day. Percentages do not add to 100% due to rounding.
Source: Telstra.

Figure 3.7 Telstra payphone fault repair performance in rural areas, 2009–10



Note: Prescribed timeframe for repair in rural areas is two working days. Percentages do not add to 100% due to rounding.
Source: Telstra.

Figure 3.8 Telstra remote area payphone fault repair performance in remote areas, 2009–10



Note: Prescribed timeframe for repair in remote areas is three working days. Percentages do not add to 100% due to rounding.
Source: Telstra.

Installation of payphones

Under the USO, communities or members of the public can apply for installation of a Telstra-operated payphone in a public place. During 2009–10, there were 156 such applications, of which 68 (44 per cent) were accepted by Telstra.

Payphones for people with disabilities

The Communications Alliance and the then Human Rights and Equal Opportunity Commission developed a guideline on payphone accessibility for people with disabilities in 2006. The guideline states that service providers should work with organisations representing people who have a hearing or speech impairment to identify appropriate locations for payphone teletypewriters (TTYs) in metropolitan or regional areas. The guideline further states that priority is to be given to the provision of TTY payphones at locations such as medical, judicial and educational institutions, shopping centres and transport terminals. As at 30 June 2010, Telstra had 175 TTY payphones in operation, a decrease of one payphone from the previous year.

Payphone removals

During 2009–10, Telstra removed 1,536 payphones from service after public consultation, comprising 950 in urban areas, 543 in rural areas and 43 in remote areas. After consultation, Telstra also cancelled the proposed removal of 463 payphones, comprising 212 in urban areas, 246 in rural areas and five in remote areas.²

Payphone removal and relocation complaints

The ACMA's role in payphone removal complaints is as an 'office of last resort'. Complaints raised with the ACMA must first have been raised and dealt with by Telstra's complaint-handling processes. The ACMA's role in assessing complaints is to determine whether Telstra has met its obligations as set out in its Standard Marketing Plan (SMP) and other agreed processes.

In 2009–10, the ACMA received 18 complaints about payphone removals (covering 129 payphones) and none about the relocation of payphones. Based on the information provided, no evidence was found that any of the proposed removals contravened Telstra's SMP.

Customer Service Guarantee Standard

The Customer Service Guarantee Standard (CSG Standard) sets minimum service standards for carriage service providers (CSPs) installing and repairing standard telephone services for residential and small business customers with five or fewer services. If a CSP fails to meet the minimum performance standards, compensation may be payable to the customer.

Services subject to the CSG Standard accounted for approximately 69 per cent of all fixed-line standard telephone services in Australia at June 2010. The ACMA receives information from CSPs that supply the majority of services covered by the CSG Standard.

The reported number of telephone services covered by the CSG Standard decreased by 1.8 per cent to 7.36 million between 30 June 2009 and 30 June 2010 (Table 3.3).

Table 3.3 Customer Service Guarantee Standard service numbers, at 30 June

	2006 (‘000)	2007 (‘000)	2008 (‘000)	2009 (‘000)	2010 (‘000)
AAPT	583	429	331	250	200
Optus	1,129	1,109	1,035	915	949
Primus	220	n/p	184	n/p	127
Telstra	6,740	6,313	6,383	6,281	6,038
Other	256	170	36	42	42
Total	8,928	7,905	7,969	7,488	7,356

n/p: not provided.
Source: CSP data.

Table 3.4 sets out the CSG Standard timeframes within which service providers must connect telephone services and complete fault repairs. The CSG Standard timeframes vary according to the location of the customer (urban, major rural, minor rural or remote areas) and, in the case of connections, whether infrastructure is readily available.

Table 3.4 Customer Service Guarantee Standard timeframes

CSG Standard timeframe (working days)

	In place connection	New service connection		Fault repair
		Close to infrastructure	Not close to infrastructure	
Community				
Urban	2	5	20	1
Major rural	2	10	20	2
Minor rural	2	15	20	2
Remote	2	15	20	3

Note: Urban is defined as communities with 10,000 or more people; major rural is defined as communities with between 2,500 and 10,000 people; minor rural is defined as communities with between 200 and 2,500 people; remote is defined as communities with up to 200 people.

Source: CSP Standard.

Connections

The performance of the main CSPs in meeting CSG Standard timeframes for new service connections (across all areas) ranged from 89.4 per cent (AAPt) to 98.8 per cent (Primus) for 2009–10. Table 3.5 shows CSP performance in 2008–09[†] and 2009–10 in meeting CSG Standard new service connection timeframes both in terms of percentage and number of new services. A ‘new service connection’ is the connection of a telephone service to a premises where there is the need for additional work to be completed (e.g. cabling).

Table 3.5 Customer Service Guarantee (CSG)—Percentage and number of new service connections provided within CSG Standard timeframes

	2008–09 [†]				2009–10			
	AAPT	Optus*	Primus	Telstra	AAPT	Optus*	Primus	Telstra
Urban areas	91.0%	95.9%	n/p	88.3%	88.1%	98.2%	98.9%	89.8%
Major rural areas	94.7%	n/a	n/p	89.6%	93.1%	n/a	95.3%	91.4%
Minor rural areas	95.3%	n/a	n/p	88.0%	92.3%	n/a	100%	90.1%
Remote areas	94.1%	n/a	n/p	84.7%	100%	n/a	n/a	88.2%
All areas	91.8%	95.9%	n/p	88.3%	89.4%	98.2%	98.8%	90.0%
Number								
Urban areas	8,653	189,877	n/p	328,828	4,031	207,509	3,325	319,545
Major rural areas	2,102	n/a	n/p	33,312	1,286	n/a	122	29,152
Minor rural areas	429	n/a	n/p	41,593	241	n/a	141	31,388
Remote areas	16	n/a	n/p	1,600	4	n/a	n/a	1,318
All areas	11,200	189,877	n/p	405,333	5,562	207,509	3,588	381,403

[†] Revised data for 2008–09 has been included in this table.

* Optus data covers its own urban network only and excludes reseller activity on other networks.

n/a: not applicable.

n/p: not provided.

Note: Urban is defined as communities with 10,000 or more people; major rural is defined as communities with between 2,500 and 10,000 people; minor rural is defined as communities with between 200 and 2,500 people; remote is defined as communities with up to 200 people.

Source: CSP data.

Table 3.6 sets out the performance of the main CSPs in meeting CSG Standard timeframes for in-place service connections. The CSG Standard defines an ‘in-place service connection’ as being one where there has been a previous working CSG service which has been cancelled and is available for automatic reconnection or reactivation by the CSP. Performance (across all areas) ranged from 90 per cent (Telstra) to 99.8 per cent (Primus) for 2009–10.

Table 3.6 Customer Service Guarantee (CSG)—Percentage and number of in-place service connections provided within CSG Standard timeframes

	2008–09 [†]				2009–10			
	AAPT	Optus*	Primus	Telstra	AAPT	Optus*	Primus	Telstra
Urban areas	93.7%	97.4%	n/p	91.6%	94.6%	99.3%	99.8%	91.1%
Major rural areas	95.0%	n/a	n/p	90.8%	94.8%	n/a	99.8%	86.7%
Minor rural areas	93.3%	n/a	n/p	90.6%	94.8%	n/a	100%	85.4%
Remote areas	100%	n/a	n/p	90.6%	100%	n/a	100%	87.4%
All areas	94.0%	97.4%	n/p	91.4%	94.6%	99.3%	99.8%	90.0%
Number								
Urban areas	13,858	9,546	n/p	558,405	5,449	9,128	11,384	531,256
Major rural areas	3,784	n/a	n/p	70,164	1,450	n/a	661	61,760
Minor rural areas	641	n/a	n/p	73,628	276	n/a	507	67,323
Remote areas	48	n/a	n/p	3,226	7	n/a	2	2,768
All areas	18,331	9,546	n/p	705,423	7,182	9,128	12,554	663,107

[†]Revised data for 2008–09 has been included in this table.

*Optus data covers its own urban network only and excludes reseller activity on other networks.

n/a: not applicable.

n/p: not provided.

Note: Urban is defined as communities with 10,000 or more people; major rural is defined as communities with between 2,500 and 10,000 people; minor rural is defined as communities with between 200 and 2,500 people; remote is defined as communities with up to 200 people.

Source: CSP data.

Fault repairs

Table 3.7 shows CSP performance in 2008–09[†] and 2009–10 in meeting CSG Standard fault repair timeframes both in terms of percentage of faults repaired and the number. Performance (across all areas) ranged from 93.4 per cent (Telstra) to 97.3 per cent (AAPT) in 2009–10.

Table 3.7 Customer Service Guarantee (CSG)—Percentage and number of faults repaired within CSG Standard timeframes

	2008–09 [†]				2009–10			
	AAPT	Optus*	Primus	Telstra	AAPT	Optus*	Primus	Telstra
Urban areas	94.2%	90.6%	n/p	90.5%	97.4%	93.8%	97.0%	93.6%
Rural areas	83.1%	92.3%	n/p	90.8%	96.8%	84.2%	97.3%	93.0%
Remote areas	82.6%	95.8%	n/p	87.5%	92.0%	84.0%	85.7%	89.4%
All areas	92.1%	90.6%	n/p	90.5%	97.3%	93.8%	97.0%	93.4%
Number								
Urban areas	48,099	157,005	n/p	635,512	42,699	198,613	34,381	651,402
Rural areas	9,989	724	n/p	245,606	11,191	651	3,453	238,106

Remote areas	90	23	n/p	4,617	92	21	6	4,327
All areas	58,178	157,752	n/p	885,735	53,982	199,285	37,840	893,835

[†]Revised data for 2008–09 has been included in this table.

Note: Urban is defined as communities with 10,000 or more people; rural is defined as communities with between 200 and 10,000 people; remote is defined as communities with up to 200 people.

n/p: not provided.

Source: CSP data.

Appointments

During 2009–10, Telstra made 518,245 CSG Standard-related appointments (Table 3.8). Of these, two per cent (or 10,422) did not meet the CSG Standard appointment-keeping timeframes. Optus reported only the number of missed appointments for 2009–10. AAPT reported that it did not miss any appointments in 2009–10 and Primus stated it missed eight appointments for the year. AAPT and Primus did not provide data on the total number of CSG Standard appointments or the percentage of appointments met within CSG Standard timeframes for 2009–10.

Table 3.8 Customer Service Guarantee (CSG)—Appointment-keeping performance, 2009–10

	AAPT	Optus*	Primus	Telstra
Total number	n/p	n/p	n/p	518,245
Number kept	n/p	n/p	n/p	507,823
Number missed	0	1,844	8	10,422
Percentage missed	n/p	n/p	n/p	2

n/p: not provided.

Source: CSP data.

CSG Standard payments

As a result of missing CSG Standard timeframes during 2009–10, Telstra made 133,152 compensation payments totalling \$5.28 million to customers and Optus made 18,953 payments totalling \$0.71 million. AAPT made 4,362 payments totalling \$0.39 million while Primus made 1,228 payments totalling \$0.09 million.

Exemptions from the CSG Standard

Under the CSG Standard, a CSP is able to declare an exemption from complying with a performance standard due to circumstances that are beyond the control of the provider or if there is a need to move staff or equipment to an area affected by circumstances beyond the control of the provider. Many of the declared exemptions related to extreme weather events or natural disasters.

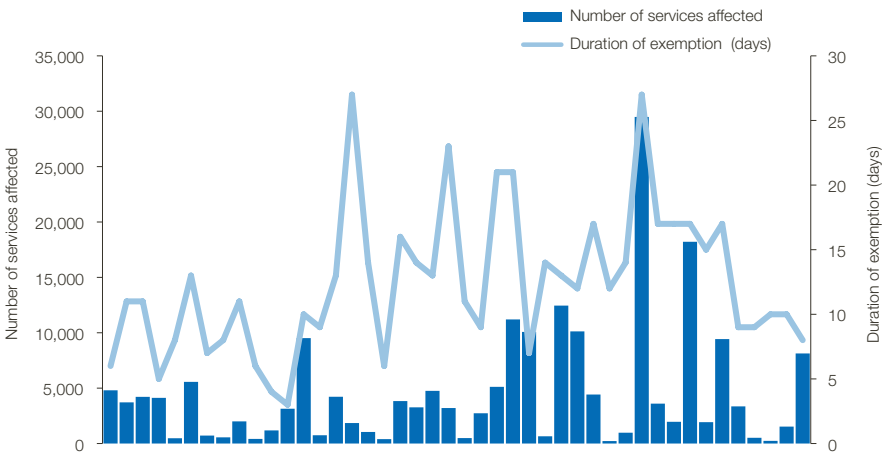
Providers must notify customers individually or publicly (via a public notice published in a newspaper circulating in the affected area) of an exemption. If an exemption is declared as a result of extreme weather conditions, the public notice must provide evidence that the extreme weather conditions outlined in the notice meet the definitions set out in the CSG Standard.

During 2009–10, Telstra declared 44 exemptions. Of these, 43 were due to extreme weather conditions and one was due to a natural disaster. The number of services affected by exemptions ranged from 222 to 29,485. The average number of services affected was 4,582. The number of days claimed per exemption ranged from three to 27, with the average duration being 13 days.

Optus declared 33 exemptions during 2009–10, of which 32 were due to extreme weather conditions and one was due to a natural disaster. The number of services affected by exemptions ranged from 125 to 8,845. The average number of services affected was 1,716. The number of days claimed per exemption ranged from three to 27, with the average duration being 13 days.

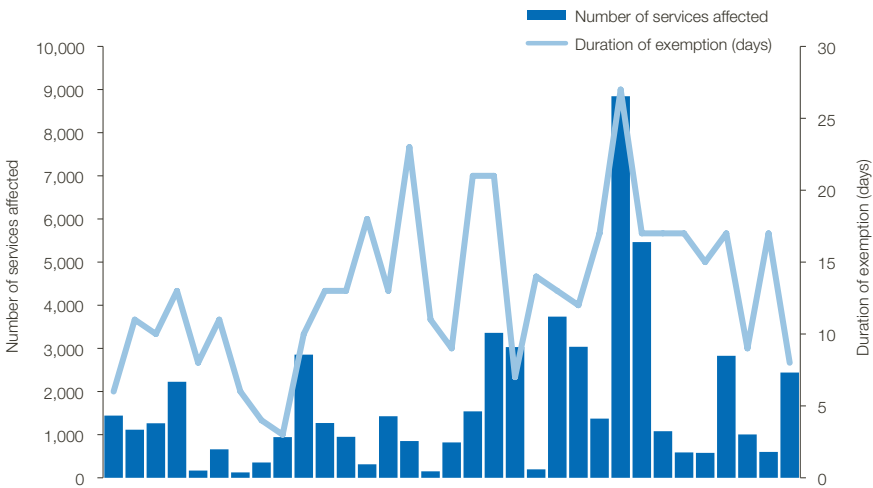
Figures 3.9 and 3.10 show the number of Telstra and Optus services affected and the duration of each declared exemption from the CSG Standard for 2009–10.

Figure 3.9 Telstra—Number of services affected and the duration of each declared exemption from the CSG Standard, 2009–10



Source: Telstra.

Figure 3.10 Optus—Number of services affected and the duration of each declared exemption from the CSG Standard, 2009–10



Source: Optus.

Network Reliability Framework

The ACMA monitors the reliability of Telstra’s fixed-line telephone service network under the Network Reliability Framework (NRF). The NRF (as a carrier licence condition) applies only to services Telstra provides to its CSG Standard-eligible customers—residential and small business fixed-line customers with five lines or less. Telstra is required to report to the ACMA on the performance of its network and to fix poorly performing cable runs and individual services.

The NRF monitors performance at the following three levels:

- > Level 1: National and geographical area level, based on Telstra's 44 field service areas (FSA)
- > Level 2: Local level—disaggregated parts of the network known as cable runs
- > Level 3: Individual service level, which includes all Telstra services covered by the CSG Standard.

Level 1 is designed to inform the public about overall network reliability performance. Under Level 2 and Level 3, Telstra is required to remediate poorly performing parts of its network.

Level 1—National and field service area performance

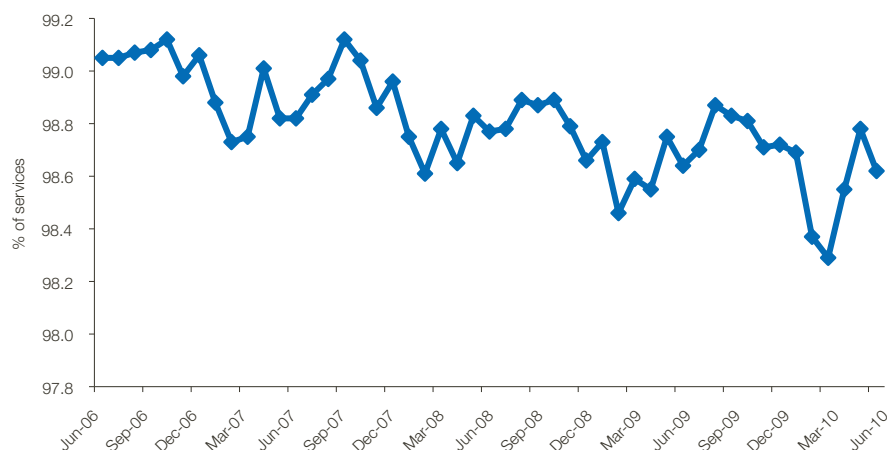
Level 1 of the NRF requires Telstra to publish monthly data showing the reliability of services nationally and in 44 FSAs across Australia. Telstra's national Level 1 performance data is presented in Figure 3.11. This level of the NRF is designed to inform the public about the reliability of services generally. The reliability measures under Level 1 are:

- > Level 1(a)—the percentage of CSG Standard services that did not experience a fault during the month
- > Level 1(b)—the percentage of time in a month that CSG Standard services, on average, are available.

The ACMA also uses data provided under Level 1 of the NRF to calculate:

- > Level 1(c)—the average time (in hours) for fault-affected CSG Standard services to be repaired for the month.

Figure 3.11 Level 1(a)—Proportion of Telstra CSG Standard services that did not experience a fault



Source: The ACMA, Telstra.

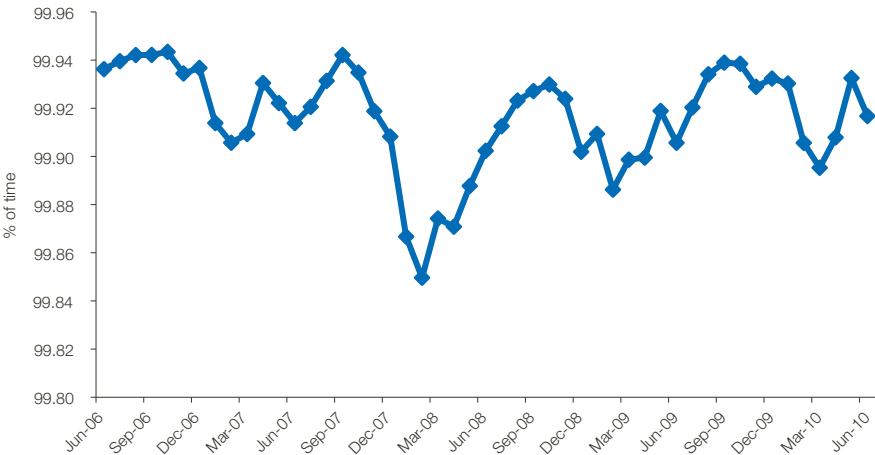
Performance for Level 1(a) has declined during 2009–10 compared with previous years. While the annual percentage of fault-free services remains above 98 per cent, small changes in this figure represent relatively large changes in the number of faults occurring on the network. During 2009–10, Telstra experienced an increase in fault activity. This was partly due to extreme weather events occurring across various parts of Australia, particularly in the March 2010 quarter.

Under Level 1(a), FSAs in urban areas experienced a slightly lower percentage of faults than FSAs covering non-urban areas. On average, 1.27 per cent of services experienced a fault in any given month in urban areas, while 1.45 per cent of services in non-urban areas experienced a fault in any given month. As in previous years, CSG Standard services affected by faults in urban areas usually experienced lower average downtime hours than non-urban areas. On average, in terms

of elapsed time, it took 37 hours and 51 hours to restore fault-affected services in urban and non-urban areas respectively.

Level 1(b) measures the percentage of time in a month that services (on average) are available. A service is considered to be available if it is not awaiting repair. The performance is calculated based on the total amount of time associated with fault repairs and then averaged across all services, whether or not they had a fault in the month. In 2009–10, services were available, on a monthly average, 99.92 per cent of the time (nationally). This compared to 2008–09, where services were available, on a monthly average, 99.91 per cent of the time (nationally).

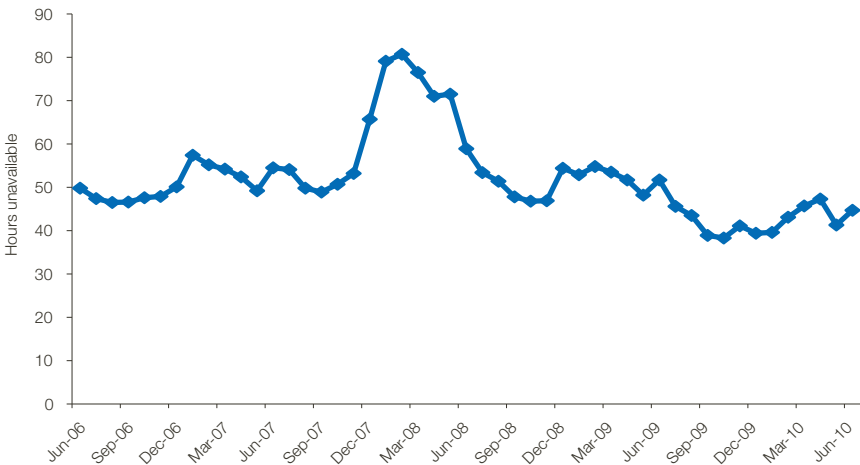
Figure 3.12 Level 1(b)—Average percentage of time Telstra CSG Standard services were available, based on monthly reports



Source: The ACMA, Telstra.

Level 1(c) measures the average number of hours taken by Telstra to restore fault-affected services in the month. While Level 1(b) takes into account all services, Level 1(c) only considers services that experienced a fault.

Figure 3.13 Level 1(c)—Average time for Telstra to restore fault-affected services



Source: The ACMA, Telstra.

Performance for Level 1(c) indicates that the average time taken to restore fault-affected services decreased during 2009–10 compared with previous years. In 2009–10, in terms of elapsed time, it took 43 hours, on average, to restore services that had a fault. In 2008–09, it took, on average, 51 hours to restore services that had a fault. When examined in conjunction with performance for Level 1(a), it can be concluded that, while the proportion of services experiencing faults increased, Telstra is restoring fault affected services in a more timely manner.

Level 2—Local cable run remediations

Level 2 of the NRF requires Telstra to report on and undertake remediation work on the 40 lowest performing cable runs (a set of 10 or 100 copper wire pairs within a physical cable sheath) each month. This is to meet minimum quotas based on the number of operational CSG services on the cable run.

Telstra identified the required 480 cable runs and reported it had completed remediation and monitoring of 465 cable runs in 2009–10. Telstra also remediated an additional 54 cable runs associated with the reported cable runs, where it made operational sense to do so. This is slightly fewer than 2008–09 when Telstra remediated an additional 58 cable runs.

Telstra is required to remediate each reported cable run within six months, but may apply to the ACMA for an extended remediation period in certain circumstances. During 2009–10, Telstra applied for extensions of time on eight cable runs. All of these applications were approved by the ACMA.

Following remediation, cable runs are assessed over a six-month period against a criterion of a 90 per cent reduction in the average network event volume. Failure to achieve this criterion may result in further remediation and assessment. Telstra achieved the 90 per cent reduction on all 465 cable runs that had been assessed during 2009–10.

Level 3—Individual service performance

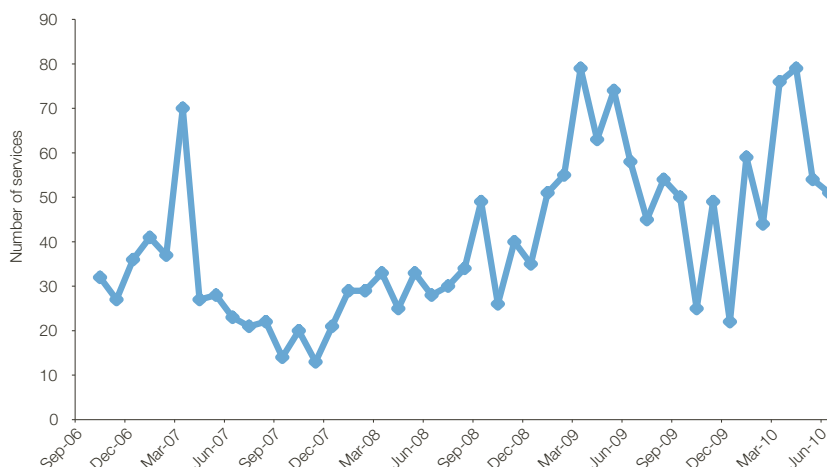
Telstra is required to take action to prevent an individual CSG Standard-eligible service from experiencing more than:

- > three faults in a rolling 60-day period, or
- > four faults in a rolling 365-day period.

Telstra is required to report to the ACMA any services that breach these thresholds, investigate the performance of the service and undertake necessary remediation.

Figure 3.14 shows that the number of services experiencing four or more faults in a rolling 60-day period may vary widely from month to month.

Figure 3.14 Level 3(a)—Telstra CSG Standard services with four or more faults in a rolling 60-day period

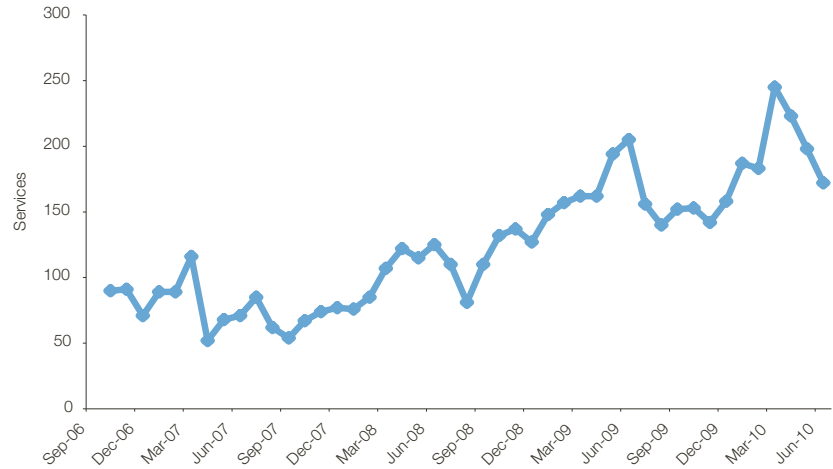


Note: Due to changes to the reporting arrangements for Level 3 data from October 2006, only data from this point onward are being used for analysis.

Source: Telstra.

Telstra has reported a comparable number of services experiencing breaches of the 60-day threshold, reporting 51 breaches per month (on average) in 2009–10 and a total of 608 for the year. In 2008–09, Telstra reported an average of 50 breaches per month and a total of 594 for the year.³

Figure 3.15 Level 3(b)— Telstra CSG Standard services with five or more faults in a rolling 365-day period



Note: Due to changes to the reporting arrangements for Level 3 data from October 2006, only data from this point onward are being used for analysis.
Source: Telstra.

Telstra reported an increase in the number of services experiencing breaches of the 365-day threshold, reporting 176 breaches per month (on average) and a total of 2,109 for 2009–10. This was an increase on 2008–09, where Telstra reported 144 breaches per month (on average) and a total of 1,725 breaches for the year.⁴

Telstra is required to remediate any service that breaches the fault thresholds and then monitor that service for an eight-month period. If a service experiences a fault during the monitoring period (known as a monitoring period fault), Telstra must report this to the ACMA together with an assessment as to whether the fault is related or unrelated to the original fault(s) that caused the contravention. In 2009–10, Telstra reported 600 monitoring period faults (across 534 individual services) and assessed 22 faults as related to the original contravention. In 2008–09, Telstra reported 377 monitoring period faults (across 322 individual services) and assessed 13 faults as related to the original contravention.

Each service reported under Level 3 is required to undergo remediation. Telstra is required to report to the ACMA on the expected date for completion of the remediation. It is also required to report on a quarterly basis any services where remediation has not been completed within agreed timeframes. In 2009–10, Telstra reported 1,102 delays to remediation (that is, where remediation was not completed within agreed timeframes, with an average reported delay to remediation of 112 days. Some services were reported as experiencing more than one delay.

Priority assistance

Priority assistance is the priority telephone connection and repair service for people with a diagnosed life-threatening medical condition who are at risk of suffering a rapid and life-threatening deterioration in their condition. Telstra is required to offer the service as a requirement of its carrier licence conditions, while two CSPs, AAPT and Primus, voluntarily offer priority assistance services in line with the industry code, ACIF C609:2007 *Priority Assistance for Life Threatening Medical Conditions*. The number of priority assistance customers is presented in Table 3.9.

Table 3.9 Number of priority assistance customers, at 30 June 2010

	2007	2008	2009	2010
Telstra	188,802	163,292	195,173	210,462
AAPT	3,104	4,834	1,901	2,642
Primus	2,026	1,690	1,515	579

Source: Telstra, AAPT, Primus.

Priority assistance customers are given faster connection and fault repair of their fixed-line telephone service. A service must be connected or a fault repaired within 24 hours in urban and rural areas (an area with a population greater than or equal to 200 people) or 48 hours in remote areas (areas with a population of fewer than 200 people).

Tables 3.10 and 3.11 provide information about the performance of Telstra, AAPT and Primus in meeting priority assistance timeframes for connections and fault repairs.

Table 3.10 Priority assistance—Connection requests, by financial year

	2006–07		2007–08		2008–09		2009–10	
	Number	% completed on time	Number	% completed on time	Number	% completed on time	Number	% completed on time
Telstra								
National	76,324	93%	74,360	91%	51,971	88%	53,498	92%
Urban	55,682	94%	53,320	91%	37,592	88%	39,538	92%
Rural	20,001	92%	20,503	90%	13,963	88%	13,517	92%
Remote	641	91%	537	85%	416	85%	443	90%
Primus								
National	668	n/p	952	n/p	153	n/p	130	100%
Urban	662	n/p	739	n/p	149	n/p	106	100%
Rural	6	n/p	210	n/p	4	n/p	24	100%
Remote	0	n/p	3	n/p	0	n/p	0	n/a
AAPT								
National	272	83%	437	86%	269	94%	201	91%
Urban	181	84%	317	87%	197	94%	184	93%
Rural	79	82%	113	84%	70	91%	17	78%
Remote	12	79%	7	71%	2	100%	0	n/a

n/p: not provided.

n/a: not applicable.

Note: Urban is defined as communities with 10,000 or more people; rural is defined as communities with between 200 and 10,000 people; remote is defined as communities with up to 200 people.

Source: CSP data.

Table 3.11 Priority Assistance—Fault restoration requests, by financial year

	2006–07		2007–08		2008–09		2009–10	
	Number	% completed on time	Number	% completed on time	Number	% completed on time	Number	% completed on time
Telstra								
National	105,446	93%	118,758	90%	116,158	93%	92,215	92%
Urban	71,236	94%	81,402	91%	80,433	94%	64,707	93%
Rural	33,526	91%	36,572	87%	35,110	90%	27,119	89%
Remote	684	88%	784	83%	615	86%	389	84%
Primus								
National	1012	n/p	960	n/p	876	n/p	380	100%
Urban	n/p	n/p	n/p	n/p	n/p	n/p	292	100%
Rural	n/p	n/p	n/p	n/p	n/p	n/p	88	100%
Remote	n/p	n/p	n/p	n/p	n/p	n/p	0	n/a
AAPT								
National	1168	79%	671	88%	871	96%	743	95%
Urban	790	81%	503	90%	647	96%	655	95%
Rural	362	74%	159	86%	198	95%	88	91%
Remote	16	79%	9	70%	26	84%	0	n/a

n/p: not provided.

n/a: not applicable.

Note: Urban defined as communities with 10,000 or more people; rural defined as communities with between 200 and 10,000 people; remote, communities with up to 200 people.

Source: CSP data.

Telstra's local presence plan

As part of its licence conditions—Carrier Licence Conditions (Telstra Corporation Limited) Declaration 1997 (Amendment No. 2 of 2005)—Telstra is required to maintain a local presence in regional, rural and remote Australia, to the extent that this is broadly compatible with its overall commercial interests. The local presence plan must set out the range of activities and strategies that Telstra will deploy in regional, rural and remote Australia to fulfil its obligation.

On 29 June 2009, the ACMA received notification from the Minister that Telstra's 2009 local presence plan had been approved. The 2009 local presence plan replaces the 2006 plan and is effective for three years, until June 2012.

Under its licence conditions, Telstra must report annually on the progress of its local presence plan. On 27 August 2010, Telstra submitted a report setting out how it met the requirements of this carrier licence condition in 2009–10.

National Relay Service

The National Relay Service (NRS) provides people who are deaf or who have a hearing- and/or speech-impairment with access to a standard telephone service on terms, and in circumstances, that are comparable to the access other citizens have to a standard telephone service. The NRS legislative obligations are outlined in Part 3 of the *Telecommunications (Consumer Protection and Service Standards) Act 1999* (TCPSS Act).

The NRS provides communication services that enable:

- > a person with a speech impairment to speak to another person, with the relay officer repeating any part of the message that has not been understood

- > a person who cannot hear or use their voice to communicate in text, using a teletypewriter (TTY) or the internet relay service, with the relay officer reading the message to the other party and typing the responses back to the caller
- > a person with a speech impairment to listen to a phone conversation and type their responses for the relay officer to read to the other party
- > a person with a hearing impairment to communicate by voice, with the relay officer typing the spoken response
- > access to a text emergency service with a TTY via the number 106.

The NRS also has an outreach component to raise awareness of its service. This component offers training and support to new and existing users.

Use of the NRS

The NRS is provided under contract to the Australian Government. The Australian Communication Exchange Limited (ACE) provides the relay service component. WestWood Spice (WWS) provides the outreach service component, which delivers information, support and training to users and potential users of the NRS.

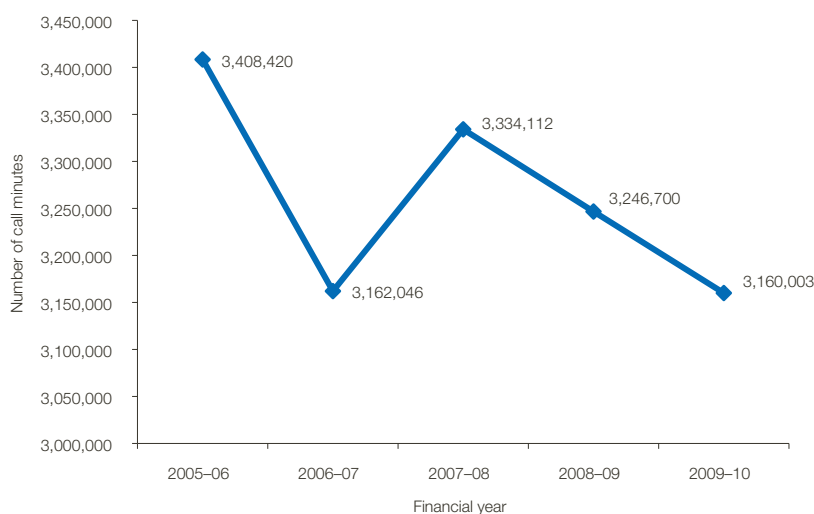
Use of the NRS is measured by the number of call minutes relayed each year. Figure 3.16 shows that annual call minutes have declined over the last five years, with the exception of 2007–08, which showed an increase of 5.7 per cent.

Total call minutes relayed in 2009–10 decreased by 2.7 per cent to a total of 3,160,003, compared with 3,246,700 in 2008–09.

Internet relay was introduced in September 2007. During 2009–10, internet relay call minutes accounted for 36 per cent of total call minutes relayed, compared with 27.5 per cent during 2008–09 and 20 per cent during 2007–08. Monthly statistics suggest that the trend of increasing usage of internet relay is continuing, with data for the month of June 2010 indicating that internet relay call minutes accounted for 40 per cent of all call minutes.

Future trends in use are uncertain, especially given the variability in usage in recent years. However, one of the target markets for the NRS is the older, acquired hearing impairment group, which is a growing demographic. This group is the subject of an ongoing awareness campaign to educate older people of the benefits of using the NRS. This campaign also aims to educate the community of potential NRS users through targeted marketing and information sessions.

Figure 3.16 NRS call minutes



Source: ACE.

NRS levy

The NRS is funded by a quarterly levy on eligible telecommunications carriers. Payment of the levy is restricted to carriers that have gross revenue of \$10 million or more. NRS levy contributions from each carrier is calculated from its share of eligible revenue as determined in the most recent eligible revenue assessment made before the start of each quarter. The ACMA collects the NRS levy on behalf of the Australian Government.

In 2009–10, the cost of providing the NRS was \$17.1 million (including GST and subject to final reconciliation of the March and June 2010 quarters), an increase of approximately three per cent on the cost in 2008–09. The increase reflects the applicable cost price index provision in calculating the annual cost of the relay service component.

Disability equipment scheme

The *Disability Discrimination Act 1992* requires service providers to ensure that equipment supplied as part of their service allows equivalent access for consumers with a disability.

Telstra specifies the services it will supply to people with a disability in its USO Standard Marketing Plan and supplies specialised equipment through its disability equipment program. Optus and Primus also maintain a disability equipment program.

Telstra fulfilled 10,054 requests for equipment under the disability equipment program in 2009–10 and Primus fulfilled two requests during the same period. No other carriers participated. Telstra fulfilled 8,291 requests and Primus fulfilled 36 requests during 2008–09.

Number portability

Number portability refers to the ability of customers to retain their number when changing their telephone company or telephone provider supplying a particular telecommunications service. The capacity to port telephone numbers facilitates competition and motivates industry participants to develop more competitive service offerings to attract new customers from their competitors, directly benefitting the consumer. Porting volumes may indicate the level of competition within the industry, although these results may include figures due to other factors such as providers ceasing to trade or the mass-migration of consumers onto a new network due to industry consolidation.

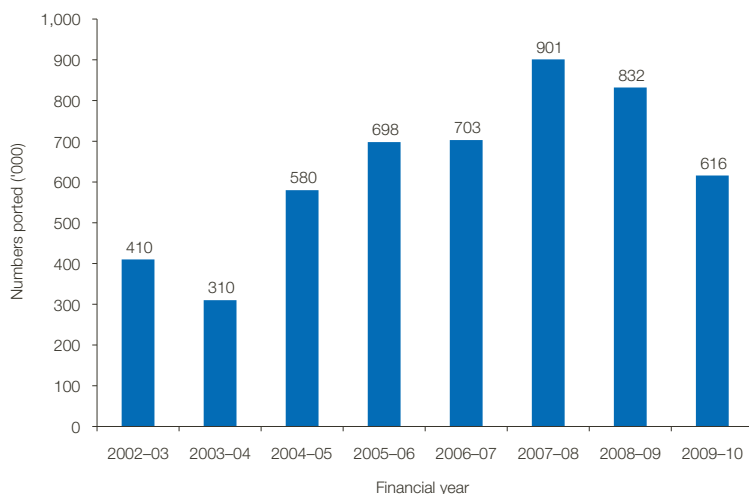
Number portability is available on the following services:

- > local numbers (since 1 January 1998)
- > freephone and local rate numbers (since 16 November 2000)
- > mobile numbers (since 25 September 2001).

Local number portability

Local number portability (LNP) refers to the porting of geographic numbers from one service provider to another. During 2009–10, the volume of local numbers ported was 615,860, an average of 51,322 per month. This represents a 26 per cent decrease over the 832,218 numbers ported in 2008–09. Compared to previous years, this decline continues the reversal in local number porting from the peak of 2007–08, when more 901,000 local number ports occurred.

Figure 3.17 Local numbers ported



Source: The ACMA's annual industry data request.

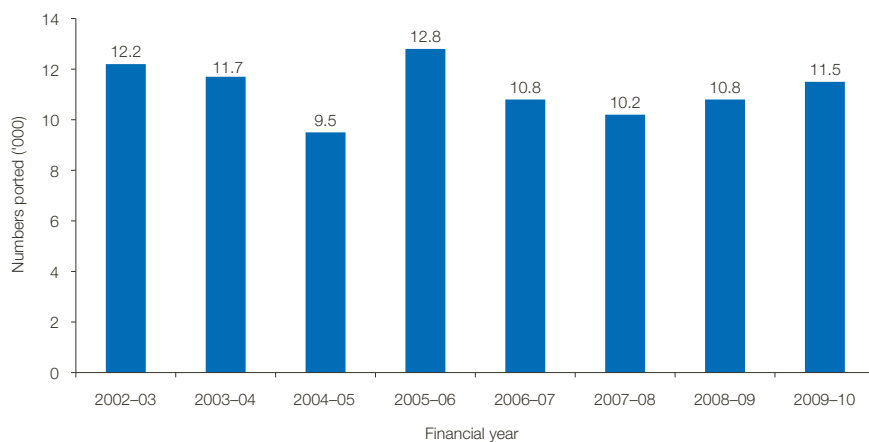
Freephone and local rate number portability

Freephone and local rate numbers (FLRNs) include local rate services (provided on numbers beginning with the digits 13) and free phone services (provided on numbers beginning with the digits 1800). Industry Number Management Services Ltd (INMS) is an industry-owned, not-for-profit company that has the authority to allocate 13/1300/1800 numbers on behalf of the ACMA. The INMS also facilitates the portability of FLRN telephone services and the portability of 13/1300/1800 telephone services.

There were 11,529 FLRNs ported during 2009-10, a 6.8 per cent increase on the 10,792 ports recorded in 2008-09. This represents a relatively consistent level of porting activity since 2002-03, well within the upper and lower transactional volumes experienced in 2004-05 and 2005-06 respectively.

Since portability for FLRNs was introduced in November 2000, a total of 101,612 services have been ported at June 2010.

Figure 3.18 Freephone and local rate numbers ported



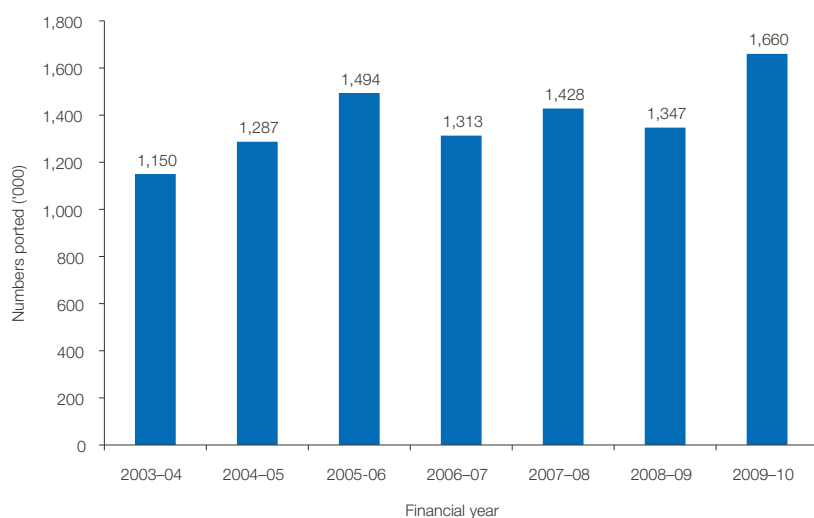
Source: Industry Number Management Services Ltd (INMS).

Mobile number portability

Mobile number portability allows a consumer to change a mobile service from one provider to another without changing the number—usually within three hours. During 2009–10, there were 1,660,873 mobile numbers ported, an increase of 23 per cent over the total of 1,346,689 recorded in 2008–09.

Of the above 2009–10 total, 1,352,387 were inter-network ports and 308,486 were intra-network ports. Intra-networks ports include ports occurring within the same carrier network but with different service providers (for example, between different resellers on the same network). Inter-network ports include ports between different carrier networks. The 2009–10 reporting period experienced the highest incidence of mobile number ports since the inception of mobile number portability in late 2001.

Figure 3.19 Mobile numbers ported



Source: The ACMA's annual industry data request.

Pre-selection and call override

Pre-selection refers to a consumer's ability to nominate a particular CSP to supply:

- > national long distance calls
- > international direct-dial calls (0011)
- > certain operator-assisted calls
- > international ring-back pricing code (0012) calls that advise a customer of the cost of a recently completed call
- > calls from fixed to mobile phones.

Pre-selection encourages CSPs to compete for customers by offering cheaper call prices, attractive pricing plans and service features. Pre-selection means that customers are not tied to the provider of their standard telephone service for specific call types. Customers can also use a four-digit override code to bypass their selected service provider to use another provider on a call-by-call basis. There were a total of 15 pre-selection agreements active between carriers during 2009–10, and a total of 20 override dial codes active between carriers during the same period.

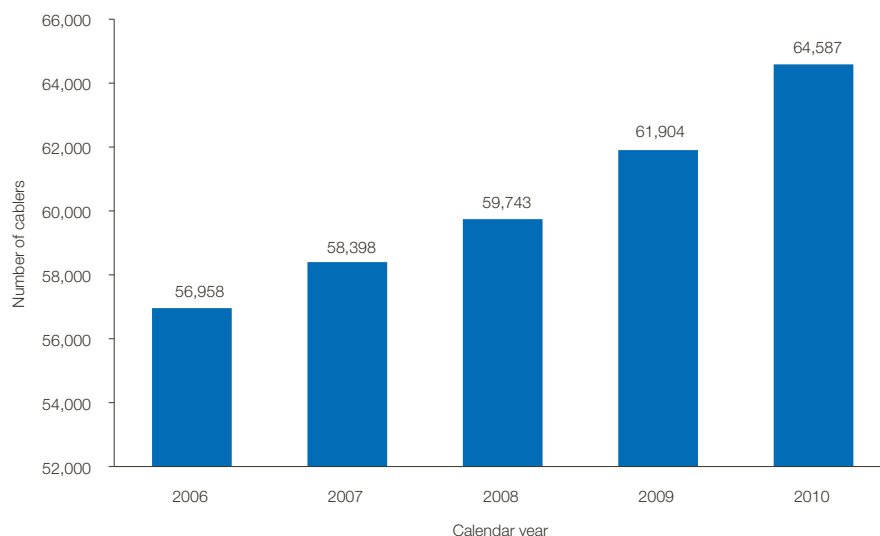
Cabling regulation

Registered cablers

All individual cablers who perform customer cabling work connected to the telecommunications network or intended for use on the customer side of the network boundary must be registered with an ACMA-accredited registrar.

On 30 June 2010, there were 64,587 registered cablers. Figure 3.20 shows that the total number of registered customer cablers in the industry has increased marginally each year since 30 June 2005.

Figure 3.20 Total number of licensed/registered cablers



Source: *The ACMA*.

In 2009–10, there were five ACMA-accredited registrars providing registration and other associated services to cablers. Registrars offered three types of cabler registration during 2009–10:

- > open—covering all types of residential and commercial cabling work
- > restricted—covering a restricted range of cabling work typically conducted in residential and small business settings
- > lift—covering telecommunications cabling for lift installations.

Before being granted registration, cablers must meet the ACMA's competency requirements that address health, safety and network integrity issues.

Enforcing cabling compliance

The ACMA is responsible for investigating complaints about non-compliant cabling work or work performed by unregistered cablers. Where appropriate, the ACMA conducts investigations of cabling work arising from these complaints.

During 2009–10, the ACMA received a total of 23 cabling-related complaints. Of the complaints received, 15 related to allegations of contraventions of the Cabling Provider Rules, and eight concerned enquires into alleged unregistered cablers. In the same period the ACMA conducted 19 cabling inspections.

During 2009–10, the ACMA did not issue any cabling advice notices or warning notices under the *Telecommunications Act 1997* (the Act). There were no telecommunications infringement notices issued this reporting year.

Do Not Call Register

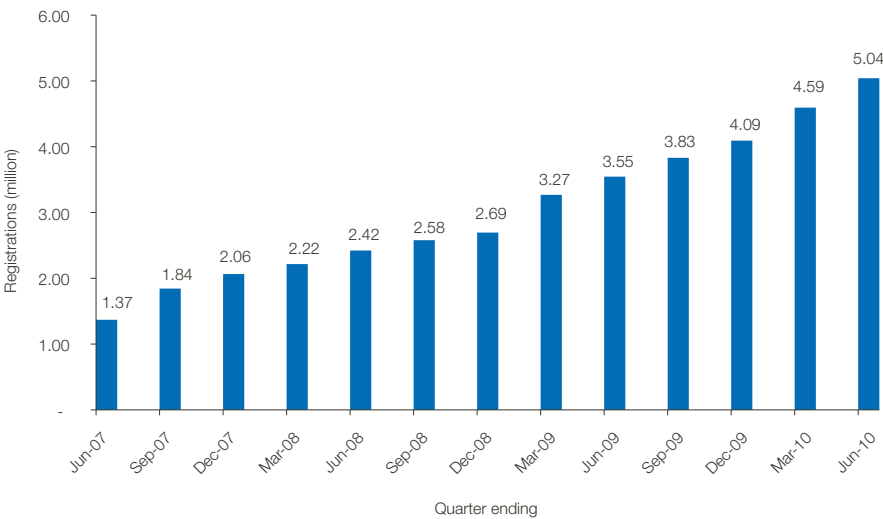
The DNCR Act creates a general prohibition on making unsolicited telemarketing calls or sending unsolicited marketing faxes to a number listed on the DNCR.

The DNCR Act requires the ACMA to keep the DNCR or to arrange for another person to keep it. The DNCR is a secure database which allows people to list their numbers in order to avoid receiving unsolicited telemarketing calls and marketing faxes.⁵

A business number can be registered if it is only used for transmitting and/or receiving faxes. A number used to make and/or receive telephone calls (including dual purpose phone/fax lines) can only be registered if it is used primarily for private or domestic purposes. This means business telephone numbers, including business dual purpose numbers, will not generally be eligible for registration.

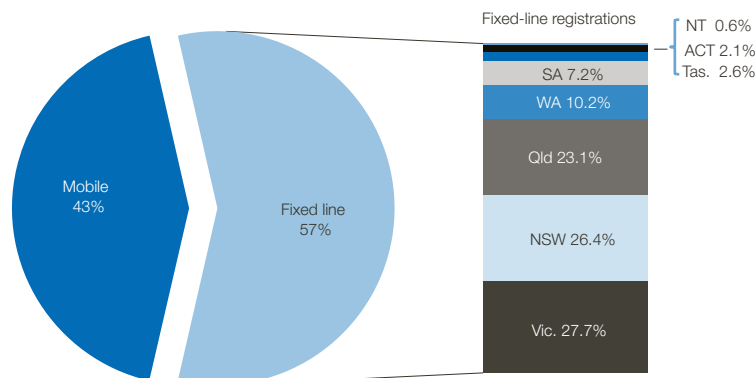
More than 1.49 million numbers were added to the DNCR in 2009–10. By 30 June 2010, a total of 5.04 million numbers had been registered. Eligible numbers can be registered in three ways — by logging on to the DNCR website at www.donotcall.gov.au, by post or by phone (Figure 3.21).

Figure 3.21 DNCR cumulative registrations



Source: Register operator (Service Stream Solutions Pty Ltd) reports to the ACMA.

Figure 3.22 Total registrations on the DNCR, by type and location, 2009–10

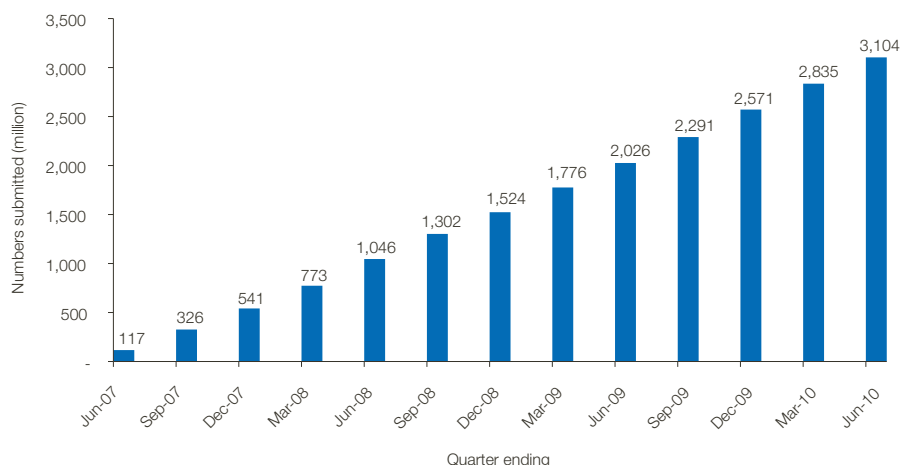


Source: Register operator (Service Stream Solutions Pty Ltd) reports to the ACMA.

While the DNCR Act creates a general prohibition on making telemarketing calls or sending marketing faxes to a number listed on the DNCR, there are limited exemptions to enable certain public interest organisations to call or fax registered numbers. Exceptions also apply where the account holder of a number on the DNCR has expressly consented to receiving the call or fax, or where consent can be reasonably inferred.

To avoid breaching the DNCR Act, telemarketers and fax marketers are able to submit their contact lists to the DNCR operator for checking against the DNCR. By 30 June 2010, 4,400 telemarketers and 56 fax marketers were registered to check numbers and nearly 3.10 billion numbers had been submitted for checking, or 'washing', against the DNCR since 25 May 2007 (Figure 3.23).

Figure 3.23 Numbers submitted for checking against the DNCR (cumulative)



Source: Register operator (Service Stream Solutions Pty Ltd) reports to the ACMA.

Amendments to the DNCR Act

The DNCR Act was amended on 30 May 2010. Three key changes were made:

- > the registration period for numbers was extended from three years to five years
- > government bodies and emergency services can now register their numbers

> fax numbers can also be registered.

The ACMA was responsible for implementing the operational changes to the DNCR.

Community attitudes to unsolicited communications

An ACMA-commissioned survey, conducted in September 2009 found:

- > the DNCR appears to have been very effective, particularly for those who have registered their home phone number
- > awareness of the DNCR is high, (75 per cent of Australians have heard of the DNCR), as is the level of interest in registering among those not currently registered
- > the majority who registered a number (95 per cent) claim the process was an easy one, with 71 per cent saying it was ‘very easy’
- > 80 per cent of respondents who had their home phone registered reported receiving fewer telemarketing calls since registering.

Telemarketing investigations

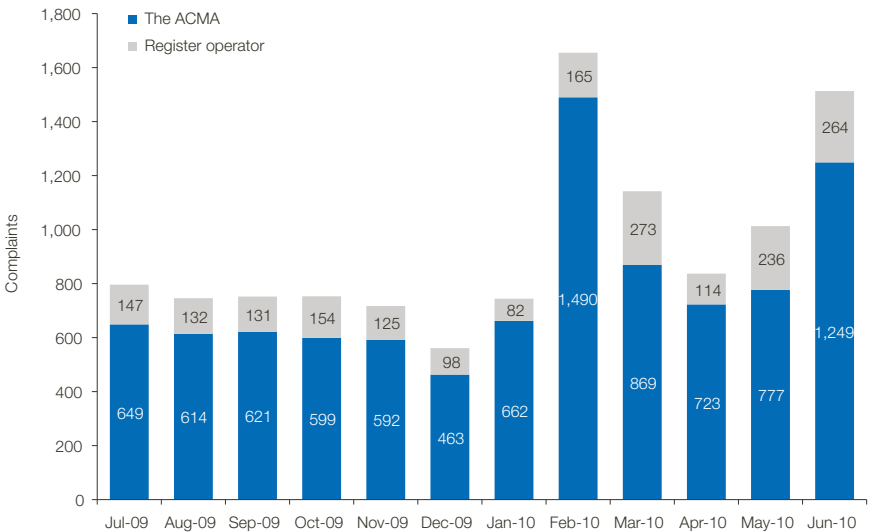
The DNCR Act prohibits most types of unsolicited telemarketing calls and marketing faxes being made or sent to numbers on the DNCR. If consumers receive telemarketing calls or marketing faxes after they have registered their number, they can lodge a complaint online or by telephone. Where a complaint raises a potential breach of the DNCR Act and/or the Telecommunications (Do Not Call Register) (Telemarketing and Research Calls) Industry Standard (Telemarketing Industry Standard), the DNCR operator forwards the complaint to the ACMA for action.

Complaints received 2009–10

During 2009–10, a total of 11,229 complaints were received. Of these, 9,308 raised potential breaches of the DNCR Act and/or the industry standard and were handled by the ACMA. The remaining 1,921 were handled by the DNCR operator.

Figure 3.24 shows complaints received each month during 2009–10.

Figure 3.24 Telemarketing complaints received, 2009–10



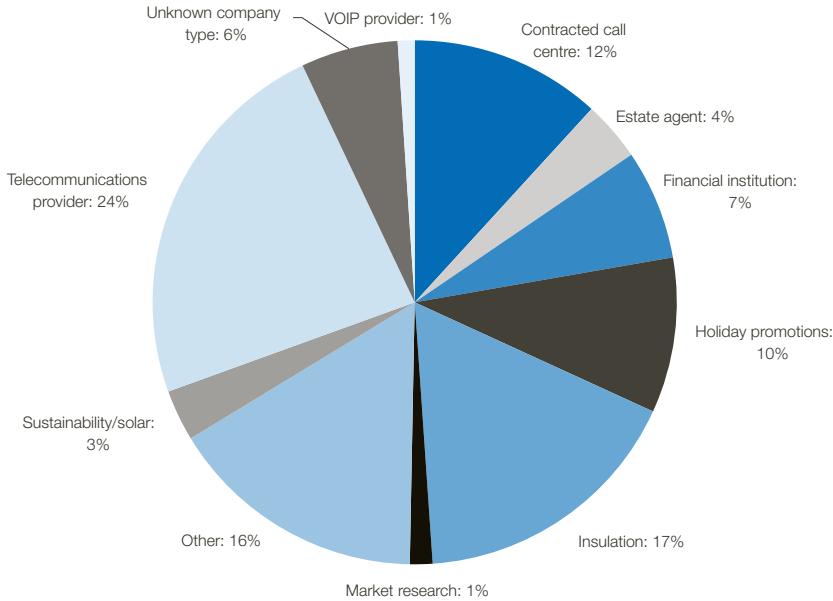
Source: Telemarketing complaints to the ACMA.

The most significant source of complaints involved the telecommunications sector, which accounted for 23 per cent of complaints received by the ACMA during 2009–10.

Other major industries accounting for complaints include insulation (17 per cent), contracted call centres (12 per cent) and holiday promotions (10 per cent). During 2009–10, 16 per cent of complaints were recorded against ‘other’ categories of businesses. These complaints include calls made by a range of small businesses that operate disparate type businesses such as cleaning, fitness or pest control services.

Figure 3.25 shows complaints received by business type in 2009–10.

Figure 3.25 Telemarketing complaints by business type, 2009–10



Note: Chart total exceeds 100 per cent due to rounding.

Source: Telemarketing complaints to the ACMA.

Overall, industry compliance with the DNCR Act and industry standard has been positive. In January 2010, the ACMA commenced a monthly online survey of new registrants. During the first six months of the survey, results have shown that 90 per cent of people who place their home phones on the DNCR notice a reduction in the number of telemarketing calls they receive.

During 2009–10, 69 per cent of complaints were closed within seven days, 87 per cent within 14 days and 93 per cent within 21 days. This performance exceeded the ACMA's target complaint-handling timeframes for the period, which were that 50 per cent of complaints would be handled within seven days, 75 per cent within 14 days and 90 per cent within 21 days.

The ACMA's approach to compliance with the Do Not Call Register

In approaching compliance, the ACMA focuses on reducing the number of prohibited telemarketing calls and marketing faxes received by consumers whose numbers are on the DNCR. This is achieved through:

- > education
- > a tiered warning system
- > formal investigations and enforcement action.

The ACMA's general approach to compliance is to try to resolve a matter, where appropriate, without using its formal powers. Where complaints are received, the ACMA generally issues an advisory letter to the relevant business providing it with an opportunity to review its compliance arrangements as necessary to address the apparent issues.

If a business continues to be the subject of consumer complaints, it will generally receive a follow-up warning letter advising that any further complaints may be the subject of a formal investigation.

It has been the ACMA's experience that the majority of businesses act on an advisory or warning letter received from the ACMA. During 2009–10, the ACMA issued 207 advisory letters and 27 warning letters to businesses that had been the subject of consumer complaints.

Compliance education

The ACMA takes measures to ensure that members of the telemarketing and fax marketing industries have access to clear and comprehensive information about their obligations under the DNCR legislation. Measures taken during 2009–10 included:

- > Maintenance of the DNCR website, which has telemarketing and fax marketing information sheets, brochures, frequently asked questions and other educational material tailored to industry and consumer audiences.
- > The ACMA initiated an education and awareness campaign aimed at improving the real estate industry's understanding of and compliance with the DNCR Act. This campaign incorporated education, the development of a PowerPoint presentation for training use by agents and their staff, and the development of an industry-specific information sheet.
- > In January 2010, in response to a significant number of complaints received about insulation installers calling numbers on the DNCR, the ACMA commenced an 'insulation installer initiative'. This initiative was aimed at educating and informing members of the insulation industry about their legislative responsibilities, and included the development of industry-specific information on the ACMA's website for the home insulation industry.
- > Following the expansion of the DNCR Act on 30 May 2010 to cover fax marketing, the ACMA undertook an education and liaison programme targeting fax marketing. This campaign incorporated meeting with key industry stakeholders, distributing information packs to industry, establishing a fax marketing industry webpage and developing and holding industry forums in major cities during July 2010.

Investigation and enforcement

During 2009–10, the ACMA commenced 13 investigations under the Act into alleged breaches of the DNCR Act. These investigations related to businesses that appeared to have systemic, ongoing compliance issues, and had continued to be the subject of consumer complaints, despite receiving an advisory or warning letter from the ACMA. Each investigation focused on calls made or caused to be made, by the relevant business over a nominated period, incorporating all consumer complaints received during that period.

Twelve investigations were finalised during 2009–10. Enforcement actions arising from these investigations included:

- > the issue of four infringement notices ranging from \$1,100 to \$101,200
- > the acceptance of seven enforceable undertakings
- > the issue of six formal warnings.

Australian Internet Security Initiative

The Australian Internet Security Initiative (AISI), developed and managed by the ACMA, is a key tool to help address the e-security threat posed by 'botnets'—networks of computers that have become compromised through the surreptitious installation of malicious software (malware). This malware enables the computer to be controlled remotely for illegal and harmful activities, including the dissemination of spam, hosting of 'phishing' sites and distributed denial of service attacks on internet infrastructure.

Under the AISI program, the ACMA provides information to participating Australian ISPs about 'compromised' computers residing on their networks. The ISPs then contact their customers to inform them that their computers are compromised and assist them in restoring correct operation.

The AISI was originally piloted with six ISPs in November 2005. It has progressively expanded since that time, with 82 ISPs participating at 30 June 2010. Those now participating include most major and mid-level ISPs who supply services to the majority of Australian internet customers. The ACMA will continue to expand and enhance the AISI in 2010–11.

In 2009, the House of Representatives Standing Committee on Communications commenced an inquiry into cybercrime. The report of the inquiry, *Hackers, Fraudsters and Botnets: Tackling the Problem of Cyber Crime*, was released in June 2010.

Spam Intelligence Database

During 2009–10, the ACMA designed and built a new spam analysis system—the Spam Intelligence Database (SID). SID is a unique system capable of analysing hundreds of thousands of spam email messages per day.

The system currently accepts spam reports submitted by users of Telstra BigPond webmail accounts, other spam reporting mechanisms, the ACMA's own spam traps and third party spam traps.

The information indexed and collated through SID's processes is substantial and enables the ACMA to identify commonalities between otherwise distinct spam messages, which can lead to increased visibility of a spammer's activities. This additional information also enables identification of the varying methods used to send spam.

The data contained in SID assists the ACMA, law enforcement agencies and overseas regulators to track down spammers and take action against them.

The ACMA will continue to enhance SID's capabilities in 2010–11.

Internet industry codes of practice

The Internet Industry Spam Code of Practice (the Spam Code) was developed by the internet industry and registered by the ACMA in March 2006. The code came into force on 16 July 2006. Designed to complement the *Spam Act 2003* (Spam Act), the Spam Code requires internet and email service providers to provide spam-filtering options to their subscribers. They must also give subscribers information about how to deal with spam and have a process for handling complaints from subscribers. There were no complaints made to the ACMA in relation to the Spam Code in 2009–10.

In 2009–10, the Internet Industry Association developed the Internet Service Provider Cyber Security Code of Practice (the iCode). A key objective of the iCode is to 'operationalise' the AISI, that is, to establish a uniform approach for ISPs when acting on AISI reports to swiftly notify and assist their customers to rectify compromises. This voluntary code was launched on 6 June 2010.

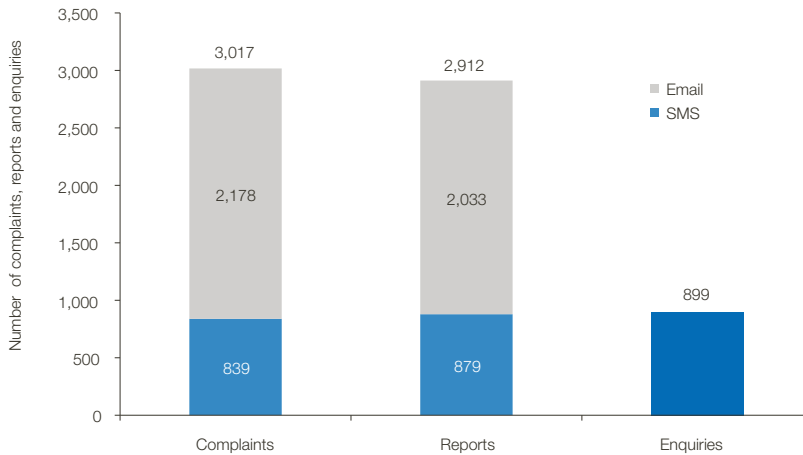
Spam monitoring and compliance

The ACMA had a number of high profile and successful enforcement outcomes as a result of its role enforcing the Spam Act. The year also saw the launch of the newest spam reporting tool, Spam SMS. The ACMA was also selected to host the sixth joint LAP–CNSA workshop in October 2010.

Complaints, reports and enquiries

During 2009–10, a record number of spam complaints, enquiries and reports were made to the ACMA (Figure 3.26). During 2009–10, changes to the online complaints forms and the launch of Spam SMS resulted in a 49 per cent increase in the total number of complaints, enquiries and reports made.

Figure 3.26 Spam complaints, reports and enquiries received by the ACMA, 2009–10



Source: Spam complaints reports and enquiries to the ACMA.

During 2009–10, the ACMA received 6,828 complaints, reports and enquiries about spam through its website, telephone hotline and Spam SMS. Of this total, 3,017 were complaints, 899 were enquiries and 2,912 were reports. There were 4211 complaints and reports about email and 1,718 about SMS.

The ACMA also sent:

- > 1,156 emails to message senders about Spam Act compliance
- > 16 preliminary inquiry letters.

The upward trend in complaints and reports about spam activity is expected to continue in 2010–11.

Spam SMS

On 9 June 2010, the ACMA launched its Spam SMS service for the public to quickly and easily report spam by SMS. Spam SMS is a dedicated number—0429 999 888—that the public can use to forward spam SMS messages directly to the ACMA.

Spam SMS contributed to a record number of spam SMS reports, with 398 received in the testing phase (from 31 March until the launch on 9 June) and 395 received after the launch on 9 June. This contributed to a 58 per cent increase on reports and complaints of SMS spam from the previous year. Twenty-eight per cent of Spam SMS reports appeared to be SMS-based scams.

Federal court prosecutions

This year saw successful outcomes for the ACMA in two Federal Court prosecutions for contraventions of the Spam Act.

The first Federal Court action for SMS spam resulted in penalties totalling \$22.25 million being imposed against seven of the eight respondents. The ACMA alleged that the respondents were engaged in a complicated scheme to obtain mobile phone numbers from members of dating websites, using fake member profiles, in order to send commercial electronic messages by SMS. It was alleged that the messages offered the opportunity to chat via SMS using services described as the 'Safe Divert' or 'Maybemeet' services and that the chat was not offered by genuine members of dating websites but employees of Mobilegate Ltd and Winning Bid Pty Ltd. Consumers were charged up to five dollars per message. Judgment for an eighth respondent is pending.

In the second Federal Court action, the ACMA was granted declarations and injunctions against Lance Thomas Atkinson for causing unsolicited spam emails advertising herbal products, watches and other items to be sent to Australians. A penalty of \$210,000 was also imposed.

Enforcement outcomes

As a result of an involved investigation into allegations of breaches of the Spam Act arising from a marketing campaign that promoted certain Coca-Cola products by SMS, the ACMA issued a formal warning to Coca-Cola South Pacific Pty Ltd and accepted enforceable undertakings from Vodafone Hutchison Australia Pty Ltd (VHA), New Dialogue Pty Ltd and Big Mobile Pty Ltd. All three undertakings required the companies to review, audit and report SMS messaging processes and training programs.

The VHA and New Dialogue enforceable undertakings included a financial component, while Big Mobile opted to pay compensation to recipients of any SMS message that it sends that breaches the Spam Act during the term of the 12 month enforceable undertaking.

During the year, the ACMA accepted eight enforceable undertakings and issued four formal warnings.

Enforceable undertakings were accepted from:

- > MYOB Australia E1 Pty Ltd (\$8,000)
- > Vodafone Hutchison Australia Pty Ltd (\$110,000)
- > Big Mobile Pty Ltd (at risk)
- > New Dialogue Pty Ltd (\$22,000)
- > Commonwealth Securities Pty Ltd (\$55,000)
- > Funmobile Australia Pty Ltd (\$55,000)
- > Virgin Mobile Pty Ltd (\$22,000)
- > Best Buy Australia Pty Ltd (\$8,000).

At 30 June 2010, the ACMA was undertaking approximately 20 ongoing mid-level and major investigations relating to alleged breaches of the Spam Act.

The ACMA continued its educative role about spam for consumers and industry throughout the year. Activities included updating all content on the website, publishing the spam complaints-handling policy, participating at industry events and meeting with government agencies, industry stakeholders and other groups to discuss issues relating to spam.

Seoul-Melbourne MOU

A new Seoul-Melbourne Multilateral Memorandum of Understanding on Cooperation in Countering Spam was agreed upon and signed by MOU signatories, including the ACMA, in May 2010. The Korean Information Security Agency is chair and secretariat of the group for the first 12 months of the new MOU. The new MOU will continue the established objective of sharing information between members about spam activity relevant to the member's jurisdiction.

Mobile premium services

Mobile premium services (MPS), often referred to as premium SMS (or MMS), cost more than a standard SMS (text message) or MMS (multimedia message). They are accessed from a mobile phone via SMS to a number starting with 191, 193–197 and 199, and offer information or entertainment services including news, sport and weather updates, voting for television contestants, ringtones, games, music tracks and videos, horoscopes and chat groups as well as information of wider application (for example, public transport timetables and exam results).

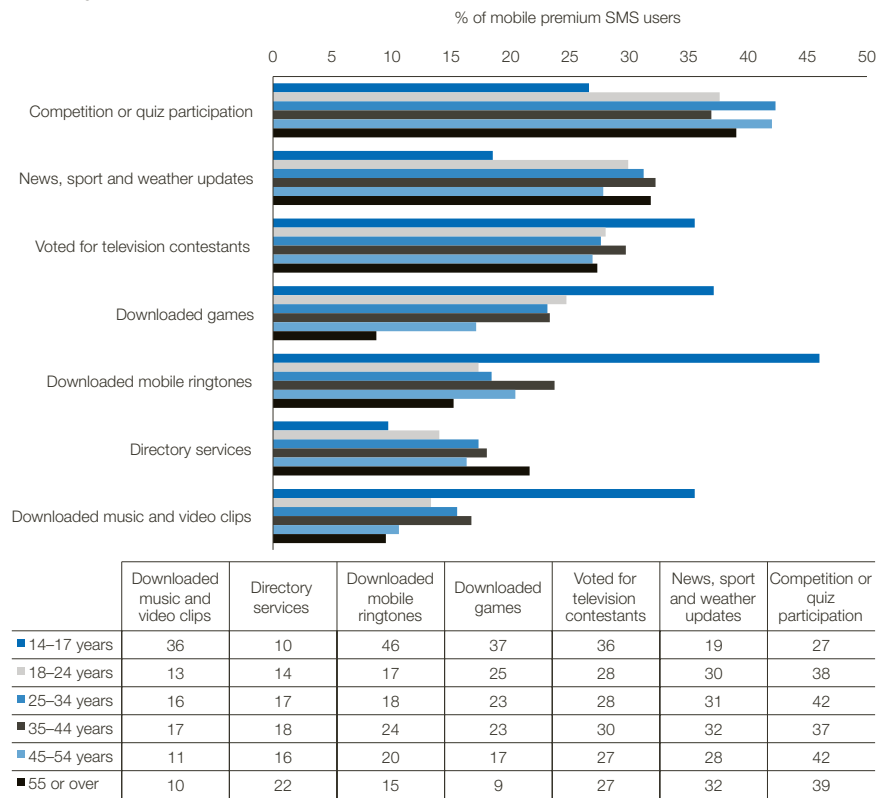
Research commissioned by the ACMA indicates that the majority of people have used MPS at some point, with 25 per cent of Australians having used them in the past year. Some MPS are subscription services that require customers to agree to receive ongoing or periodic delivery of services where they pay to receive SMSs or downloads on a regular basis.⁶ Subscription services can be costly and may include a sign up fee of as much as \$10, together with a charge for each delivery or access to content; for example, three messages per week at \$5 per message.

The ongoing nature of subscription services has led to high costs being incurred by some customers, resulting in unexpectedly high bills for post-paid customers or exhaustion of pre-paid mobile phone credits for others.

Use of mobile premium services in Australia

Consumers commonly use MPS to access content or as an adjunct to other sources of entertainment. The kinds of services most frequently accessed include competition or quiz participation, news sport and weather updates, and voting for television contestants. Figure 3.27 shows that customers in different age groups prefer different service types, with 14–17 year olds more likely to access games and multimedia content, and those aged 55 or over more likely to make use of directory services.

Figure 3.27 Leading mobile premium services used, June 2010



Note: Multiple responses allowed.
Source: ACMA-commissioned research, June 2010.

Most MPS customers accessed MPS infrequently, with people aged 18–34 being the most frequent users. Of those customers purchasing one-off services, 69 per cent bought no more than five services in the last year, and 60 per cent of those purchasing subscription services subscribed to five or fewer services in the last year.

Attitudes to mobile premium services

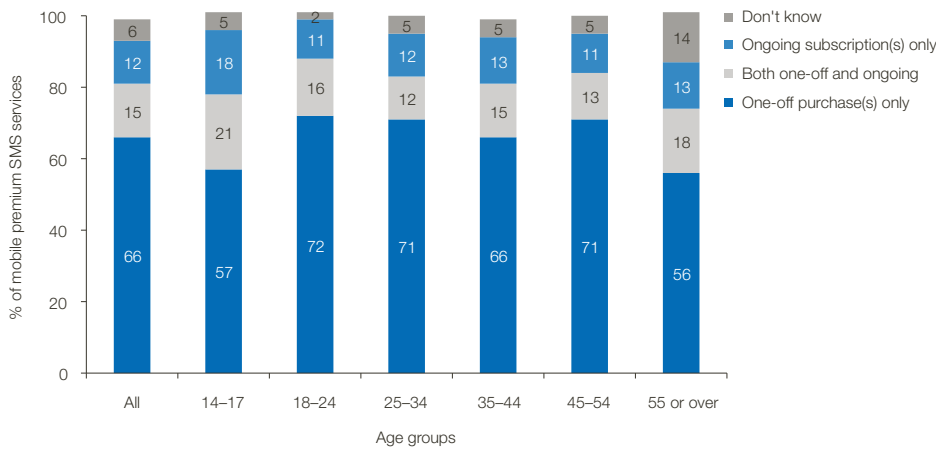
Fifty-two per cent of all MPS customers reported that they were satisfied with the services they have purchased and only 10 per cent reported that they were dissatisfied. However, attitudinal research commissioned by the ACMA highlighted that negative experiences with subscription services—for example, subscribing to a service unintentionally and receiving an unexpectedly high phone bill—made customers wary of using any MPS in the future.⁷

MPS, and in particular subscription services, were seen to provide frivolous content that is deliberately targeted at those age groups that are perceived to be vulnerable and more likely to act on impulse without reading or understanding the terms and conditions.

Subscription services

Sixty-six per cent of premium service customers reported that they had only purchased one-off products in the 12 months to June 2010 (Figure 3.28). Subscriptions were more commonly purchased by younger customers, with 39 per cent of persons aged 14–17 years reporting that they had accessed subscription services. A smaller minority of customers—six per cent—didn’t know whether the services they had accessed were subscription or not. This uncertainty was more marked in those aged 55 years or over, with 14 per cent of customers unable to identify whether the services they had purchased were subscription services.

Figure 3.28 Types of mobile premium services purchased during 2009–10



Source: ACMA-commissioned research.

Controls on spending

Given the risk of receiving unexpectedly high bills as a result of purchasing MPS, a minority of customers (25 per cent) reported that they have a limit on the amount they can spend on MPS. The majority of those (71 per cent) reported that it was a self-imposed limit, while a smaller proportion (23 per cent) had a limit imposed by their service provider. Among younger customers, particularly those aged 14–17 years, a significant minority (28 per cent) reported that they use their pre-paid credit to limit their spending on premium services.

Parental management of children’s usage

As increasing numbers of young people have a mobile phone and access to MPS, many parents have considered what controls might be appropriate over their children’s use of those services. The approaches of parents to control their children’s use of MPS varies by the age of the children concerned, with parents of children aged 8–11 years exerting the highest degree of control.

The majority of parents (70 per cent) considered that it is ‘very’ or ‘extremely important’ to limit their child’s expenditure on MPS. Strategies for controlling children’s expenditure varied by age, and included careful checking of the child’s mobile phone bill, blocking access to all premium SMS numbers, limiting the phone to certain outgoing numbers or designating a pre-paid amount on the child’s phone.

Unrequested services

Although most premium service customers were generally satisfied with the services they purchased, problems do occur and this is particularly apparent where consumers receive, and are usually charged for, services they did not intend to purchase.

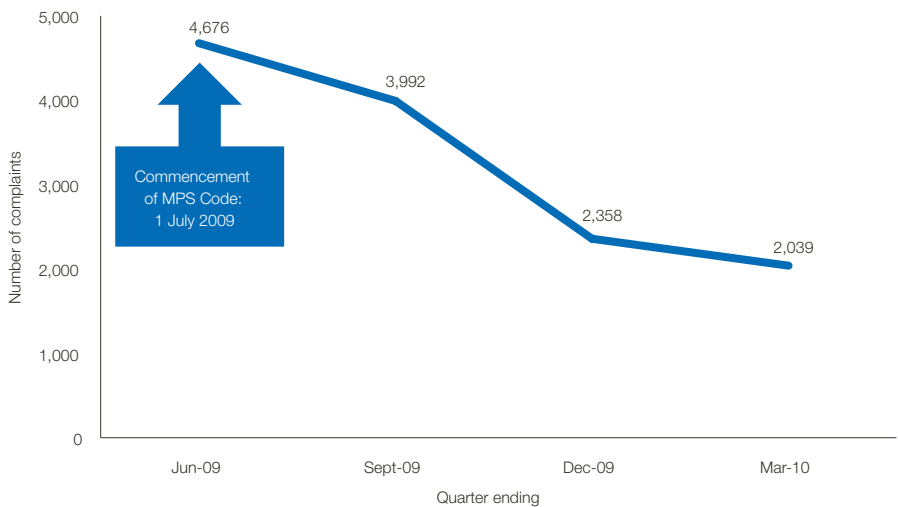
Forty-six per cent of 14–17-year-olds and 34 per cent of those aged 55 or older, received unrequested MPS in the past three months. Of those, 86 per cent were unable to discover why the messages had been sent. Almost three-quarters of recipients took steps to stop receiving these unrequested services, with the most common approach being to text STOP in reply. Other attempts to stop the unrequested service included contacting the premium content service provider or the mobile phone service provider, visiting an associated website or contacting a helpline. A small number of customers chose to block access to premium services or make a complaint to the TIO.

The success of these attempts was mixed, with 41 per cent of customers receiving unrequested services reporting that it was ‘easy’ or ‘very easy’ to stop the messages, and 30 per cent reporting that it was ‘difficult’ or ‘very difficult’. No refund for the costs of the unrequested premium services was received by 68 per cent of customers.

Regulation of the mobile premium services industry

The ACMA has developed a comprehensive approach to regulating MPS and has worked closely with industry to improve its performance in consumer protection. This campaign was created in response to a long history of consumer complaints to the TIO, particularly about receiving premium services without authorisation and unexpectedly high phone bills. ACMA and industry initiatives have resulted in significant reductions in consumer complaints (Figure 3.29), but instances of non-compliance with industry code obligations continue to warrant regulatory attention.

Figure 3.29 TIO complaint issues relating to mobile premium services



Source: TIO.

Composition of the mobile premium services industry

Under the Mobile Premium Services Code (MPS Code), all content service providers and aggregators—parties that facilitate the supply of content services from content providers to carriage service providers—which supply MPS in Australia are required to provide company details to the Communications Alliance Mobile Premium Services Industry Register. As of October 2009, the register contained 237 content service providers and 16 aggregators. Of the registered content service providers, 59 (23 per cent) were located internationally in 16 countries across Europe and Australasia and also the USA. A significant number of these overseas content service providers (40 per cent) were located in the UK.⁸

Mobile Premium Services Code

The MPS Code, which was developed jointly by carriers, content providers and consumer representatives, was registered with the ACMA and took effect on 1 July 2009. The code replaced the Mobile Premium Services Industry (MPSI) Scheme and includes a number of new safeguards to better protect consumers, including rules which:

- > require that customers confirm their decision to purchase a premium SMS or MMS twice via a 'double opt-in' mechanism
- > require content suppliers and aggregators to be listed in an industry register
- > ban the advertising of premium services targeted at children under 15 years of age
- > require content suppliers to notify customers about subscriptions regularly and as they incur significant expenses
- > prohibit charges from accruing where the credit on a pre-paid mobile phone account has been exhausted.

The ACMA has monitored and audited individual premium services for non-compliant practices. During the first 12 months of the operation of the MPS Code, the ACMA audited 85 individual services and found 80 to be potentially in breach of one or more obligations. Most potential breaches were resolved informally through discussion between the ACMA and the content suppliers concerned. During 2009–10, 17 formal investigations were commenced.

The ACMA's program of review and assessment regarding the effectiveness of the regulation of MPS is ongoing. The aim of the review is to determine and develop the best strategies for protecting consumers. Communications Alliance commenced a review of the MPS Code on 5 July 2010 and it is expected that the ACMA will consider a replacement code for registration in early 2011.

Complaints to the TIO

The TIO investigates complaints regarding MPS and assists customers to resolve disputes with their mobile service providers. The most common complaints received by the TIO relate to:

- > services listed on a phone bill that weren't requested by the customer
- > insufficient information about the service provided to customers before purchase
- > unexpected high bills resulting from MPS.

The ACMA's work to improve industry performance and customer protections around MPS has led to a significant reduction in these kinds of complaints to the TIO. From a peak in 2008, complaints have steadily dropped, including a further 66 per cent reduction during 2009 since the MPS Code has been in effect.

Industry initiatives to improve compliance

In addition to developing the MPS Code, which was subsequently accepted and registered by the ACMA, the industry has taken steps to improve consumer safeguards around MPS and increase compliance with its regulatory obligations. An example of this positive work is the engagement by Telstra and Optus of WMC Global, a company that specialises in monitoring the compliance of mobile operators. WMC Global uses 'in market' assessment of premium services against individual carriers' codes of conduct and applicable industry codes. VHA is also understood to be implementing enhanced internal compliance monitoring arrangements.

Telecommunications codes—Development and review

Under Part 6 of the Act, the ACMA may register codes developed by industry bodies. At 30 June 2010, there were 22 such registered codes, comprising:

- > 19 codes developed by the Communications Alliance Limited (CA) or its predecessor, the Australian Communications Industry Forum (ACIF)
- > the Cabling Requirements for Business Code, developed by the Cabling Industry Committee
- > the Australian eMarketing Code of Practice, developed by the Australian Direct Marketing Association
- > the Internet Industry Spam Code of Practice, developed by the Internet Industry Association with the Western Australian and South Australian internet associations.

Communications Alliance codes registered by the ACMA in 2009–10

Communications Alliance developed the revised C625:2009 Industry Code—*Information on Accessibility Features for Telephone Equipment*, which was registered by the ACMA on 30 March 2010.

The Communications Alliance also developed the revised C570:2009 Industry Code—*Mobile Number Portability*, which was registered by the ACMA on 20 May 2010.

Industry compliance with telecommunications codes

Complaint-handling

The ACMA undertook an assessment of the compliance of seven carriage service providers with clause 9.1.8 of the Communications Alliance C628:2007 *Telecommunications Consumer Protections Code* (the TCP Code). This clause requires carriage service providers to record, identify and resolve complaint issues requiring attention.

Five out of the seven providers were compliant at the time of assessment. One provider was initially non-compliant but became compliant by undertaking internal complaint analysis.

The ACMA issued a direction to Soul Communications Pty Ltd to comply with clause 9.1.8 of the TCP Code in April 2010.

Billing and complaint-handling

The ACMA undertook an assessment of the compliance of five carriage service providers with clauses 6.3 and 9.1 of the TCP Code. The providers were selected for assessment based on TIO complaint statistics.

Clause 6.3 places requirements on the bills issued by providers and clause 9.1 requires CSPs to have adequate complaint-handling processes.

Of the five providers assessed, two were compliant.

Three providers—Edirect Pty Ltd (trading as VIPtelmobile), iiNet Limited and TPG Internet Pty Ltd—were issued a direction to comply with elements of clause 9.1.8 of the TCP Code, which requires providers to identify recurring or systemic problems and prevent recurrence.

In July 2009, the ACMA issued a direction to Jason Kenneth McKay trading as Web Ace to comply with clauses 6.4.3, 6.5.3(a), 9.1.1(d), 9.1.2, 9.1.4, 9.1.8, 9.2.4, 9.2.5, 9.2.6, 9.2.7 and 9.2.8 of the TCP Code. The ACMA found that Mr McKay was breaching billing requirements by processing direct debits from credit card accounts without the authority of the customer. Customers were not given the opportunity to view, query or dispute their bills prior to the direct debit taking place. The ACMA also found that Mr McKay was failing to respond to complaints. Mr McKay is no longer operating as a CSP.

Customer information on prices, terms and conditions

The ACMA is assessing the compliance of 44 CSPs with clause 4.2.1(g) of the TCP Code in response to a suggestion from its Consumer Consultative Forum.

Clause 4.2.1(g) requires suppliers, on request, to inform a customer with a disability about any telecommunications product that is available to address the customer's requirements and about how to effectively use the product. Providers were selected based on the December 2009 quarter TIO complaint statistics.

As part of its assessment, the ACMA wrote to the providers asking for details of the processes that they have in place to deal with such requests.

The ACMA also requested details of the forms of these requests and how many complaints had been received about the availability of information on such products and their uses for customers with a disability.

Of those who responded, their processes for providing information to customers about clause 4.2.1(a) are sufficient to meet the broadly stated requirement. For the more specific clause 4.2.1(g), very little information is kept by providers on such requests. Most requests are dealt with at the point of sale or via customer service staff, and not necessarily identified as this type of request. The ACMA will encourage further discussion of the issue during the TCP Code review.

Customer transfer

Following concern arising from TIO complaint statistics, the ACMA investigated the compliance of a CSP with the customer transfer provisions of the TCP Code. The provisions aim to ensure a seamless and informed transition for a customer from one provider to another. The company has since gone out of business.

General compliance with Telecommunications Consumer Protections Code

The ACMA has assessed the practices of 11 carriage service providers to establish their compliance with the TCP Code following increasing complaints to the TIO. The ACMA is liaising with the providers following initial findings of non-compliance.

Telecommunications Industry Ombudsman complaint statistics

The Telecommunication Industry Ombudsman Scheme is an independent scheme providing for the resolution of unresolved complaints about CSPs by residential and small business customers. In 2009–10, the TIO had 1,162 members, up from 1,125 in 2008–09.

Information about complaints to the TIO provides a measure of the telecommunications industry's performance in dealing with its customers. The TIO recorded 485,471 complaint issues in 2009–10, up from 481,418 complaint issues in 2008–09. This represents a 0.8 per cent increase in a year and a 614 per cent increase since 2003–04. Table 3.13 shows complaint trends diverging markedly between fixed-line, mobile and internet services.

During 2009–10:

- > mobile complaint issues increased by 18 per cent to 209,715
- > fixed-line complaint issues decreased by 11 per cent to 142,167
- > internet complaint issues increased by seven per cent to 123,669
- > MPS complaints issues decreased by 66 per cent to 9,920.

Table 3.12 TIO complaint issues, by financial year

Year	Mobile phone	Fixed line	Internet	Mobile premium services	Total	% change
1998–99	–	63,069	3,954	–	67,023	–
1999–00	–	56,504	4,292	–	60,796	–9%
2000–01	–	72,745	7,965	–	80,710	33%
2001–02	20,434	40,303	9,497	–	70,234	–13%
2002–03	16,773	37,206	8,691	–	62,670	–11%
2003–04	21,465	36,167	10,388	–	68,020	9%
2004–05	40,254	44,559	16,012	–	100,825	48%
2005–06	52,119	52,294	23,066	–	127,479	26%
2006–07	54,285	54,336	48,181	10,083	166,885	31%
2007–08	85,968	96,611	63,760	22,401	268,645	61%
2008–09	178,019	159,153	115,437	28,809	481,418	79%
2009–10	209,715	142,167	123,669	9,920	485,471	1%

Notes: Complaints were not disaggregated between fixed-line and mobile services prior to 2001–02. MPS complaints for 2006–07 cover the last seven months of the financial year only.

Source: TIO.

Billing and payments

Complaint issues about billing and payments increased from 112,450 in 2008–09 to 123,515 this year. This was the largest complaint category (more than 25 per cent of total complaint issues). The most common complaints were about disputed usage, recurring and administrative charges.

Customer service

Complaint issues about customer service increased from 90,357 in 2008–09 to 93,142 in 2009–10. Complaints about customer service have increased by 244 per cent since 2006–07. The share of total complaints to the TIO that were about customer service issues remained at 19 per cent (the second highest complaint category). The main causes of customer service complaint issues concerned incorrect or inadequate advice, followed by failure to action requests.

Complaint-handling

Complaint-handling complaints increased from 66,000 in 2008–09 to 73,937 this year. Most of these complaints concerned failure to action undertakings. Complaints about complaint-handling continued to comprise 15 per cent of complaint issues.

The ACMA's concern that a third of all complaint issues related to complaint-handling and customer service, and that these complaints continued to increase, was a key factor leading to the establishment of a public inquiry into the industry's handling of these issues.

Faults

Complaint issues about faults increased from 55,579 in 2008–09 to 58,617 in 2009–10. Major sources of complaint included equipment faults for non-CSG services, reflecting the spread of 3G mobile data devices.

Contracts

Complaint issues about contracts increased from 53,814 in 2008–09 to 58,791 this year. Almost half of these complaints related to point of sale advice about products and terms.

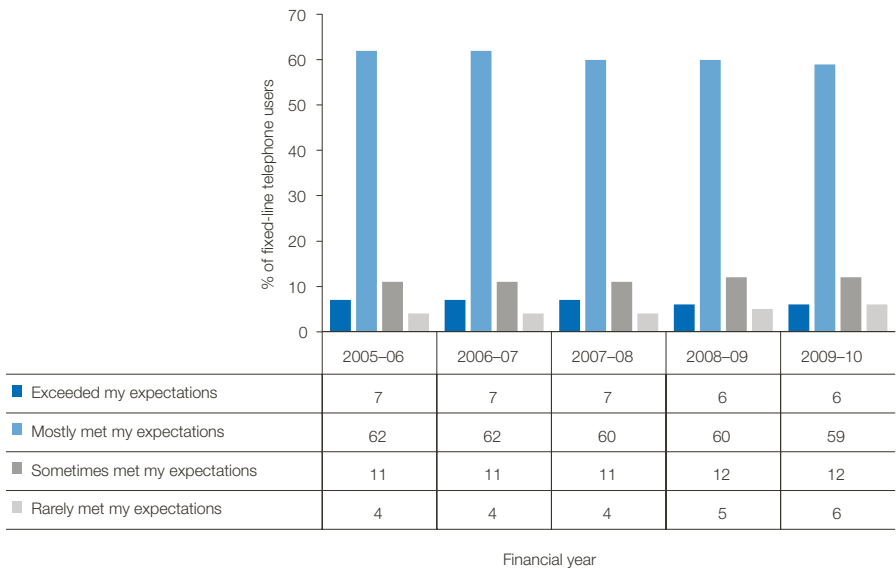
Consumer service expectations⁹

This section presents survey data relating to consumer perceptions of communication service providers, specifically whether providers have met customer service expectations. Detailed reporting on levels of satisfaction with communication services by household consumers and small and medium enterprises is also presented in the ACMA's Communication report series, *Report 3—Australian consumer satisfaction with communication services*.

In terms of the services measured, data presented shows that consumer perceptions of communication service providers in Australia have remained fairly consistent over the last five reporting periods.

During 2009–10, approximately 65 per cent of users of fixed-line telephone services in Australia believed that their local call service provider had either 'exceeded' or 'mostly met' their expectations; a further 12 per cent had their service expectations 'met sometimes', and six per cent 'rarely' (Figure 3.30). Sixteen per cent were unable to say whether or not their service expectations have been met during 2009–10.

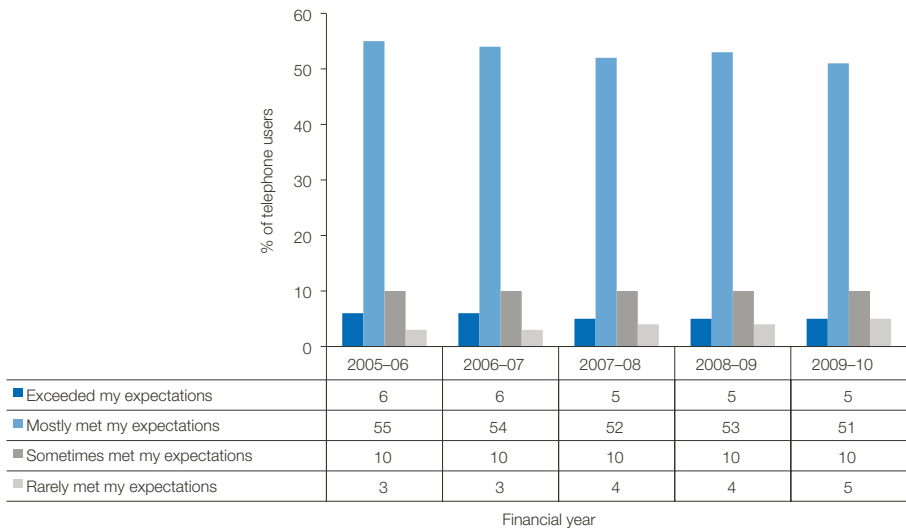
Figure 3.30 Whether local call service provider met expectations



Note: 'Don't know' responses are included in the base numbers but are not shown in the chart.
Source: Roy Morgan Single Source, June 2010.

Fifty-six per cent of fixed-line telephone service users were estimated to have their STD (subscriber trunk dialling) service expectations either 'exceeded' or 'mostly met' during 2009–10, while 10 per cent and five per cent respectively had service expectations met 'sometimes' or 'rarely'. For this service category almost 30 per cent of respondents were unable to say whether or not their STD service provider had met their expectations (Figure 3.31).

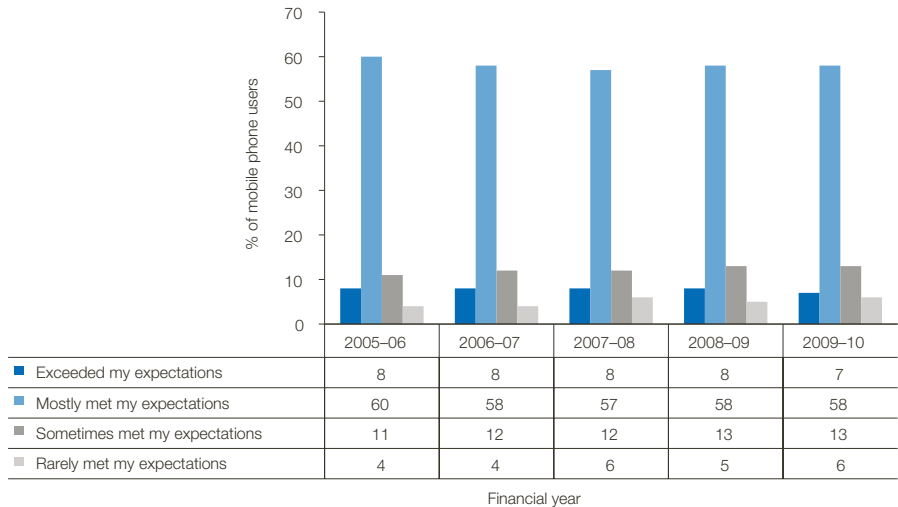
Figure 3.31 Whether STD call service provider met expectations



Note: 'Don't know' responses are included in the base numbers but are not shown in the chart.
Source: Roy Morgan Single Source, June 2010.

During 2009–10, 65 per cent of mobile phone users in Australia were estimated to have had their service expectations 'exceeded' or 'mostly met' by their mobile phone service provider, consistent with levels over the past five years. A further 13 per cent and six per cent respectively either had their expectations met 'sometimes' or 'rarely'.

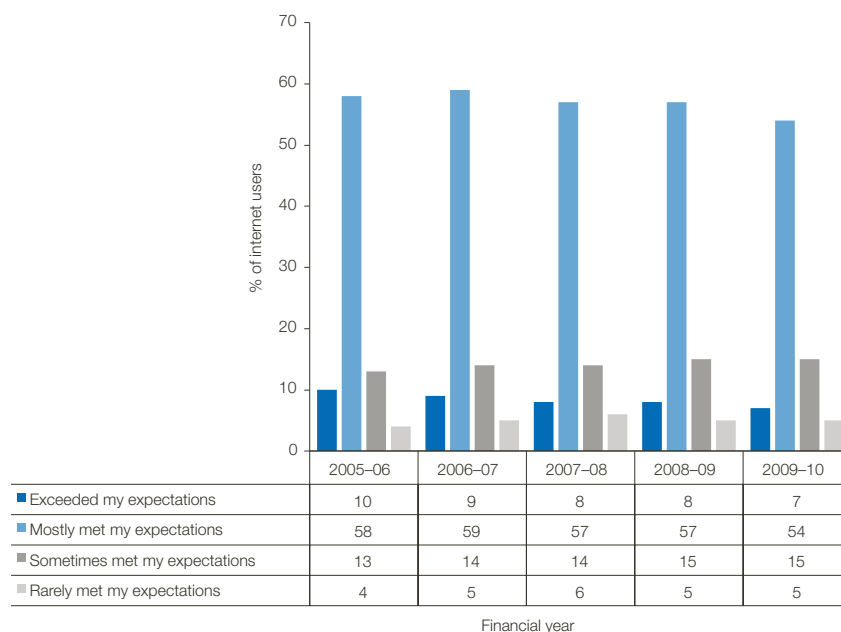
Figure 3.32 Whether mobile telephone service provider met expectations



Note: 'Don't know' responses are included in the base numbers but are not shown in the chart.
Source: Roy Morgan Single Source, June 2010.

Sixty-one per cent of internet users in Australia had their service expectations either 'exceeded' or 'mostly met' by their ISP during 2009–10, compared with 65 per cent during 2008–09. Fifteen per cent and five per cent respectively of internet users believed their ISP met their expectations 'sometimes' or 'rarely'. Nineteen per cent of respondents were unable to say whether or not their internet service expectations had been met by their ISP during 2009–10.

Figure 3.33 Whether internet service provider met expectations



Note: 'Don't know' responses are included in the base numbers but are not shown in the chart.
Source: Roy Morgan Single Source, June 2010.

Communications infrastructure regulation

Licensed telecommunications carriers have the power to undertake certain activities, including the inspection of land and installation and maintenance of facilities, in accordance with conditions specified in the Act, the Ministerial Telecommunications Code of Practice 1997 and the ACIF Industry Code C564:2004 *Deployment of Mobile Phone Network Infrastructure*.

The right to install a low-impact facility is limited to those facilities specified in the Telecommunications (Low-impact facilities) Determination 1997 (the LIF Determination) or a temporary defence facility or where the carrier holds a facility installation permit. Under the LIF Determination, carriers are able to deploy low-impact facilities without being subject to state or local council development application planning processes.

While low-impact facilities are exempt from local government planning laws, carriers must still comply with Schedule 3 of the Act and the Telecommunications Code of Practice, which includes notifying land owners and occupiers of their activities, ensuring as little detriment and damage is caused by the activity and restore the land to a similar condition before the activity began.

Installation of facilities that are not specified in Schedule 3 of the Act or the LIF Determination requires local government planning permission and the carriers must comply with relevant state and territory planning laws. This means that high impact forms of infrastructure are regulated under state and territory laws unless the carrier obtains a facility installation permit.

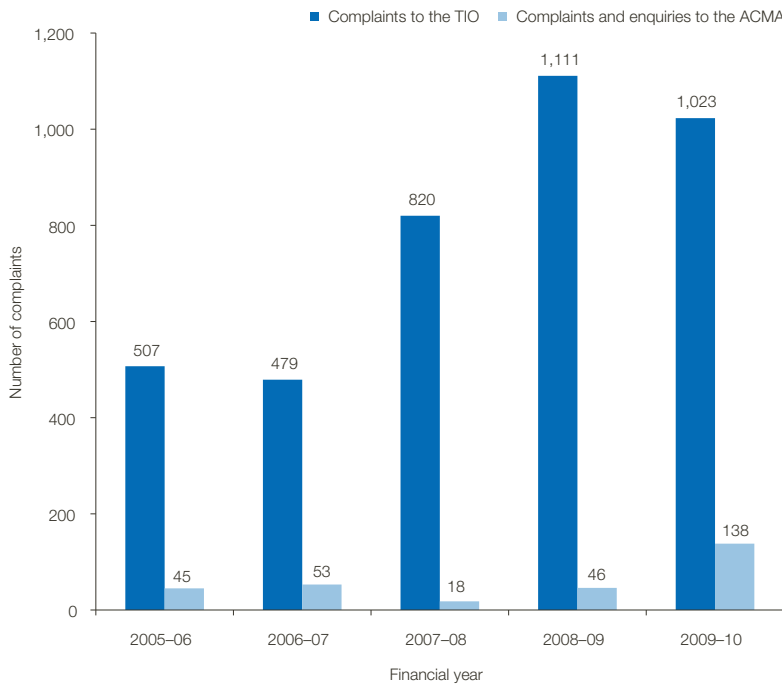
The ACMA may investigate alleged breaches of the Act and the codes.

The role of the TIO is to investigate and resolve land access complaints made by landowners or occupiers in relation to carriers' access to land and property. The majority of land access complaints to the TIO relate to damage to property by carriers and to the user charges billed as a result of damage reported to cables. During the reporting period there were a total of 1,023 complaints (not including enquiries) received by the TIO. Of these complaints:

- > 439 related to complaints about user charges billed as a result of damage to cable for example, map not accurate, cable not deep enough
- > 324 related to complaints from owner/occupier of land regarding alleged damage to property during installation of cable or low impact facility
- > 85 related to the failure of a carrier to give notice to the landowner or occupier
- > 175 complaints were objections by the landowner or occupier to the activity.

There were no directions from the TIO in relation to these objections and in many of these cases the TIO found no valid grounds for objection.

Figure 3.34 Facility installation complaints received by the ACMA and TIO



Source: The ACMA and TIO.

Electromagnetic energy regulation

The ACMA's electromagnetic energy (EME) health exposure regulatory arrangement requires a wide range of radiocommunications facilities and portable equipment, such as mobile phone handsets, to comply with EME limits set out in a standard prepared and published by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA). The standard is based on an international guideline that incorporates significant safety factors with exposure limits set well below levels shown to cause adverse health effects. ARPANSA is the government agency responsible for radiation research and protection.

Mobile phone base stations and broadcast transmission towers typically produce low EME levels in the everyday environment. A survey coordinated by ARPANSA of environmental EME from mobile phone base stations found that the signal levels on the ground near the towers fall well within the general public exposure limits of the ARPANSA standard.¹⁰

To ensure there is compliance with the EME regulatory arrangement, licensees need to have their transmitter facilities assessed, and manufacturers and importers of mobile phone handsets and similar equipment must have their products tested for compliance before supply is permitted to the Australian market. Significant penalties apply for breaches of the EME arrangements.

Mobile phone towers

The ACIF Industry Code C564:2004 *Deployment of Mobile Phone Network Infrastructure* (the Industry Code) also aims to support the ACMA's regulatory arrangements by extending the obligations on carriers to have regard to EME exposure and to consult with the community.

The Mobile Carriers Forum (MCF) is an industry group that represents the three carriers that operate mobile phone networks in Australia: Optus, Telstra and VHA. The MCF website, www.rfnsa.com.au, provides a listing of all mobile phone base stations deployed or upgraded since 2003. It also provides EME assessment reports for each of those base stations.

Complaints about carriers' compliance with the Industry Code are directed to the carriers in the first instance. The Industry Code specifies mandatory processes for complaints-handling by carriers. The ACMA examines complaints against the Industry Code and may take regulatory action under Part 6 of the Act.

The number of complaints and enquiries received by the ACMA about the installation of low-impact facilities has increased slightly from the previous reporting year.

During the reporting period, the ACMA received 137 enquiries and one complaint regarding matters covered by Schedule 3 of the Act and the Telecommunications Code of Practice. The ACMA also received 11 complaints and 48 enquiries related to the Industry Code. The carriers have conducted a total of 1580 consultations under the Industry Code during this period.

Telecommunications codes—Development and review

The Communications Alliance (previously ACIF) will be revising the Industry Code C564:2004 *Deployment of Mobile Phone Network Infrastructure* during the next reporting period.

Endnotes

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- 1 <http://services.mapinfo.com.au/ppol/welcome.do>.
 - 2 130 payphones were removed without public consultation as they were not the only payphone at a particular site.
 - 3 In the *ACMA Communications report 2008–09*, Telstra reported an average of 49 breaches per month. This minor difference is due to rounding.
 - 4 In the *ACMA Communications report 2008–09*, Telstra reported the total number of breaches as 1,724. This minor difference is due to the ACMA subsequently receiving updated data from Telstra.
 - 5 A number is eligible to be registered if it is used or maintained primarily for private or domestic purposes, for transmitting and/or receiving faxes, used or maintained exclusively for use by a government body, or an emergency service number.
 - 6 ACMA-commissioned research, June 2010.
 - 7 The ACMA, *Community research into attitudes toward the use of mobile payment services—Qualitative research report*, July 2010.
 - 8 Data sourced from the Communications Alliance Mobile Premium Services Industry Register. Communications Alliance is the peak body for the Australian telecommunications industry.
 - 9 Data presented relates to annualised average estimates.
 - 10 ARPANSA Base Station Survey 2007–09 and ARPANSA Fact Sheet EME Series No. 10, both available at www.arpansa.gov.au.



Chapter 4

Broadcasting industry performance in meeting regulatory obligations

Overview

Chapter 4 provides information on the performance of broadcasters in meeting their regulatory obligations during 2009–10. Broadcasting legislation, standards and licence conditions determine the obligations of commercial radio and television broadcasters in Australia.

Information is also presented on the number of complaints to the ACMA under broadcasting codes of practice, and about potentially prohibited content under Schedules 5 and 7 of the *Broadcasting Services Act 1992*.

Key developments in 2009–10 include:

- > continued transition to a digital broadcasting environment
- > new digital television and digital radio services delivered to audiences
- > commercial television licensees continuing to meet Australian content quotas
- > increase in the number of complaints concerning broadcasting and online content.

Chapter summary

Digitalisation of Australian broadcasting services continued during the 2009–10 reporting period, with the continuing transition from analog television services to digital television and the introduction of digital radio services.

At 30 June 2010, all metropolitan digital television services had been rolled out, with rollout of digital services in regional and remote areas of Australia progressing.

Seventy-four per cent of Australian households had converted their main set to digital television at 30 June 2010, compared with 53 per cent at 30 June 2009, an increase of 21 percentage points.

On 30 June 2010, the Mildura and Sunraysia licence area in regional Victoria became the first licence area in Australia to switch over to digital-only free-to-air television broadcasting.

During 2009–10, a number of new digital free-to-air television channels were launched including the Seven Network's 7TWO, the ABC's ABC3 and the Nine Network's GO!.

Digital radio transmissions also commenced in Adelaide, Brisbane, Melbourne, Perth and Sydney with broadcasters delivering new digital-only radio services including Austereo's *Radar Radio*, DMG's *Nova Nation* and Broadcast Operations' *Gorilla Radio*.

During 2009, Australian content quotas were met by commercial television network licensees with:

- > major metropolitan commercial network licensees exceeding the minimum 55 per cent Australian transmission quota
- > all national free-to-air commercial television broadcasting licensees meeting the quota for first release Australian drama
- > all commercial television stations meeting the minimum first-release Australian documentary requirements and annual quotas for children's programs.

In addition, all free-to-air television stations broadcasted more than the required 80 per cent of Australian sourced advertising in the 2009 calendar year.

The ACMA received a total of 2,061 broadcasting complaints during 2009–10, compared to 1,772 during 2008–09, an increase of just over 16 per cent.

During 2009–10, the ACMA received 3,212 complaints concerning online content. These complaints resulted in 2,782 completed investigations as at 30 June 2010. The number of complaints received and investigations completed increased by 172 per cent and 177 per cent respectively. Factors such as increased online participation by families, greater awareness of harmful content and complaint processes are likely to have contributed to the increase in complaints concerning online content.

Broadcasting financial results¹

The following section provides an overview of broadcasting financial results as reported to the ACMA for the period 2004–05 to 2008–09. The general decline in broadcasting revenue in the 2008–09 results are presumed to reflect the weakened economic conditions stemming from the global financial crisis and its impact on both expenditure and advertising revenue on which the commercial broadcasting sector in Australia is so heavily dependent. Only data relating to the 2008–09 reporting period is available.

Commercial television revenue and profitability

Commercial television networks reported \$3,784.4 million in revenue in 2008–09, a decrease of nine per cent in comparison to the previous year. The main source of revenue for the industry continues to be the sale of airtime to advertisers, which accounts for 92.8 per cent of the total revenue generated by the industry.

Metropolitan television markets reported a 10 per cent decrease in revenue in 2008–09, while regional television markets reported a 5.5 per cent decrease in revenue generated over the same period.

Of the total reported revenue, \$2,932.2 million (77.5 per cent) was generated by the three major television networks in metropolitan and non-metropolitan regions. The breakdown is as follows:

- > Seven Network—\$1301.1 million (34.4 per cent)
- > Nine Network—\$808.9 million (21.4 per cent)²
- > Network Ten—\$822.2 million (21.7 per cent).

Table 4.1 provides a breakdown of industry revenue performance for metropolitan and regional television markets.

Table 4.1 Revenue performance in metropolitan and regional television markets by financial year

Market	2004–05 \$m	2005–06 \$m	2006–07 \$m	2007–08 \$m	2008–09 \$m	2007–08 to 2008–09 % change
Metropolitan	3,241.9	3,062.2	3,066.3	3,232.5	2,908.5	–10%
Regional	877.4	927.6	899.9	926.8	876.0	–5.5%
Total	4,119.3	3,989.8	3,966.3	4,159.3	3,784.4	–9.0%

Note: Any discrepancies in the totals are due to rounding.

Source: ACMA Broadcasting Financial Results 2008–09.

The commercial television industry reported aggregate profits of \$265.1 million in 2008–09. This is a decrease of 26.9 per cent in comparison to the previous year. Reported results for metropolitan and regional markets were as follows:

- > metropolitan television markets reported a 42.2 per cent decrease in profit before interest and tax (PBIT) in 2008–09
- > regional television stations reported an 8.1 per cent increase in PBIT over this period.

Table 4.2 shows profit performance in the commercial television industry from 2004–05 to 2008–09.

Table 4.2 Profit before interest and tax in television markets by financial year

Market	2004–05 \$m	2005–06 \$m	2006–07 \$m	2007–08 \$m	2008–09 \$m	2007–08 to 2008–09 % change
Metropolitan	572.3	392.9	614.1	252.4	145.9	–42.2%
Regional	209.0	227.6	173.0	110.3	119.2	8.1%
Total	781.3	620.5	787.1	362.6	265.1	–26.9%

Note: Any discrepancies in the totals are due to rounding.

Source: ACMA Broadcasting Financial Results 2008–09.

Commercial radio revenue and profitability³

In 2008–09, the commercial radio industry reported revenue of approximately \$1,037.1 million, a 4.1 per cent decrease on the 2007–08 reported revenue.

It was reported that the sale of airtime generated \$984.9 million in revenue, a decrease of 4.3 per cent over the 12 months, which accounted for 95 per cent of revenue reported by the radio industry. Table 4.3 shows revenue performance since 2004–05.

Table 4.3 Revenue performance in metropolitan and regional radio markets by financial year

Market	2004–05 \$m	2005–06 \$m	2006–07 \$m	2007–08 \$m	2008–09 \$m	2007–08 to 2008–09 % change
Metropolitan	654.0	686.7	708.0	742.1	710.4	–4.3%
Regional	290.9	311.1	321.0	339.0	326.6	–3.6%
Total	944.9	997.8	1,028.9	1,081	1,037.1	–4.1%

Note: Any discrepancies in the totals are due to rounding.

Source: ACMA Broadcasting Financial Results 2008–09.

In 2008–09, the FM sector reported \$766.1 million in revenue—a 4.4 per cent decrease from the previous reporting period and representing 73.9 per cent of the total revenue reported by the radio industry. The AM sector reported revenue of \$271 million, representing a 3.2 per cent decrease from the previous reporting period (Table 4.4).

Table 4.4 Revenue performance for FM and AM radio stations by financial year

Market	2004–05 \$m	2005–06 \$m	2006–07 \$m	2007–08 \$m	2008–09 \$m	2007–08 to 2008–09 % change
FM	694.4	721.8	749.8	801.3	766.1	–4.4%
AM	250.5	276.0	279.2	279.8	271.0	–3.2%
Total	944.9	997.8	1,028.9	1,081	1,037.1	–4.1%

Note: Any discrepancies in the totals are due to rounding.

Source: ACMA Broadcasting Financial Results 2008–09.

Overall, there was a 52 per cent decline in PBIT for the commercial radio industry during 2008–09. Reported profits decreased in the metropolitan radio industry, with \$47.9 million in reported PBIT, a decrease of 73.3 per cent from the previous financial year. Regional radio stations reported a decrease in PBIT of 12.0 per cent over the same period. Table 4.5 shows the PBIT reported by metropolitan and regional radio markets each year from 2004–05 to 2008–09.

Table 4.5 Profit before interest and tax in radio markets by financial year

Market	2004–05 \$m	2005–06 \$m	2006–07 \$m	2007–08 \$m	2008–09 \$m	2007–08 to 2008–09 % change
Metropolitan	134.7	128.9	169.1	179.4	47.9	–73.3%
Regional	69.6	91.0	80.4	95.1	83.6	–12.0%
Total	204.3	219.9	249.5	274.4	131.5	–52.1%

Note: Any discrepancies in the totals are due to rounding.

Source: ACMA Broadcasting Financial Results 2008–09.

Continuing the trend of recent years, the FM sector generated a significant proportion of total reported profits in the commercial radio industry in 2008–09, with a PBIT for the year of \$123.3 million. This represents a decrease in profit of 47.0 per cent.

PBIT decreased over the last 12 months across both the AM and FM sectors. The AM sector reported 80.3 per cent decrease in PBIT. Table 4.6 shows profit generated by both sectors for the financial years 2004–05 to 2008–09.

Table 4.6 Profit before interest and tax for FM and AM radio stations by financial year

Market	2004–05 \$m	2005–06 \$m	2006–07 \$m	2007–08 \$m	2008–09 \$m	2007–08 to 2008–09 % change
FM	172.6	186.2	209.6	232.6	123.3	–47.0%
AM	31.7	33.7	39.9	41.8	8.2	–80.3%
Total	204.3	219.9	249.5	274.4	131.5	–52.1%

Note: Any discrepancies in the totals are due to rounding.

Source: ACMA Broadcasting Financial Results 2008–09.

Commercial television program expenditure

Commercial television licensees reported spending a total of \$1,380.9 million on programming for 2008–09 (the latest data available), an increase of 4.1 per cent compared with the 2007–08 year. Of this reported total programming expenditure, \$950.6 million was spent on Australian programs, which represents 68.8 per cent of total expenditure and an increase of 2.4 per cent from 2007–08 (Table 4.7). Expenditure on overseas programming increased by 7.9 per cent during 2008–09 compared with 2007–08.

Table 4.7 Total expenditure on programming by commercial television stations by financial year

Origin of programming	2004–05 \$m	2005–06 \$m	2006–07 \$m	2007–08 \$m	2008–09 \$m	2004–05 to 2008–09 % change	2007–08 to 2008–09 % change
Australian drama programs (adult and children)	127.2	140.6	108.5	131.8	144.8	13.8%	9.9%
Overseas drama	322.7	332	385.9	381.4	407.8	26.4%	6.9%
Total Australian	812.8	869.2	790.4	928.1	950.6	17%	2.4%
Total overseas	350.6	352.7	410.8	398.7	430.3	22.7%	7.9%
Total	1,163.4	1,221.9	1,201.1	1,326.8	1,380.9	18.7%	4.1%

Note: Any discrepancies in the totals are due to rounding.

Source: ACMA Broadcasting Financial Results 2008–09.

There are separate obligations for different categories of programming for free-to-air broadcasting. The ACMA's *Broadcasting Financial Results 2008–09* reports on the different levels of expenditure for each programming category, which are shown in Table 4.8.

Table 4.8 Total expenditure on Australian programs by category and financial year

Program expenditure	2004–05 \$m	2005–06 \$m	2006–07 \$m	2007–08 \$m	2008–09 \$m	2004–05 to 2008–09 % change	2007–08 to 2008–09 % change
Drama (adult)	113.8	125.3	96.2	116.3	132.1	16.1%	13.5%
Children's programs (drama and other)	21.5	20.9	24.4	26.5	22.5	4.7%	–15.1%
News and current affairs	167.3	166.2	166.9	121.9	111	–33.6%	–9.0%
Documentaries	9.2	12.4	9.0	13.4	26.7	191%	98.3%
Sport	255.8	258.8	188.3	305.7	330.8	29.4%	8.2%
Light entertainment—variety	97.8	138.2	168.7	167.6	176.7	80.6%	5.5%
Light entertainment—other	135.0	129.5	122.4	162.8	132.3	–2%	–18.8%
Other programming	12.5	17.7	14.4	13.8	25.6	104.4%	85.3%

Note: Any discrepancies in the totals are due to rounding.

Source: ACMA Broadcasting Financial Results 2008–09.

Australian content on television

The Broadcasting Services (Australian Content) Standard 2005 (Australian Content Standard) requires commercial television broadcasters to:

- > broadcast a minimum level of Australian programming
- > broadcast minimum amounts of first-release Australian drama programs
- > broadcast minimum amounts of children's programs and documentaries
- > ensure that preschool programs are Australian.

The Australian Content Standard aims to develop and reflect a sense of Australian identity, character and cultural diversity by supporting continued community access to television programs produced under Australian creative control. The Australian Content Standard treats New Zealand programs equally with Australian programs for compliance with the standard as a result of a High Court of Australia decision in 1998.

An overview of commercial broadcasting services including subscription television and community broadcasting services can be found in Chapter 1.

Overall levels of Australian content

The Australian Content Standard requires that Australian programs produced under the creative control of Australians must comprise at least 55 per cent of all programming between 6.00 am and midnight, including first-release and repeat programs. For the 2009 calendar year, the major metropolitan commercial network licensees exceeded the minimum 55 per cent Australian transmission quota:

- > Seven Network licensees transmitted more than 65 per cent Australian content in each of their markets in the five mainland state capital cities
- > Nine Network Ltd licensees transmitted more than 62 per cent Australian content in each of their three metropolitan markets of Brisbane, Melbourne and Sydney
- > Network Ten licensees transmitted more than 57 per cent Australian content in each of their markets in the five mainland state capital cities.

Australian drama

The Australian Content Standard provides for an annual and a three-yearly drama point score system for first-release Australian drama programs, including series, serials, mini-series, telemovies and feature films. The point score system for different program formats creates incentives to produce and broadcast the more expensive drama programs. The minimum annual first-release Australian drama program requirement is 250 points. All national free-to-air commercial television broadcasting licensees met the quota during 2009:

- > Seven Network licensees scored at least 384 points in each of their markets in the five mainland state capital cities
- > Nine Network licensees scored at least 297 points in their markets in Brisbane, Melbourne and Sydney
- > Network Ten licensees scored at least 264 points in each of their markets in the five mainland state capital cities.

The minimum points for first-release Australian drama programs over the three-year period from 2008 to 2010 is 860. All free-to-air commercial television broadcasting licensees are required to meet the minimum points requirement over this period.

Expenditure on Australian drama

Overall, the commercial television industry reported expenditure of \$132.1 million on Australian drama in 2008–09, an increase of \$15.8 million from the previous year. Expenditure on overseas

programming was \$430.3 million over the reporting period. Table 4.9 shows expenditure on Australian drama by commercial television stations from 2004–05 to 2008–09.

Table 4.9 Expenditure on Australian adult drama by commercial television licensees by financial year

Type of programming	2004–05 \$m	2005–06 \$m	2006–07 \$m	2007–08 \$m	2008–09 \$m	2007–08 to 2008–09 % change
Australian drama	113.8	125.3	96.2	116.3	132.1	13.5%

Note: Any discrepancies in the totals are due to rounding.

Source: ACMA Broadcasting Financial Results 2008–09.

Subscription television—Eligible drama expenditure scheme

Under the eligible drama expenditure scheme, licensees and channel providers of subscription television drama services are required to spend at least 10 per cent of their annual total program expenditure on new eligible drama programs. If this 10 per cent expenditure is not met in the current financial year, the shortfall amount must be made up in the following year.

In meeting obligations under the new eligible drama expenditure scheme, the subscription television industry spent \$28.47 million on Australian and New Zealand drama programs in the 2008–09 financial year. During this period, \$13.90 million⁴ was nominated to acquit the expenditure shortfall from 2007–08, and \$14.67 million was nominated towards meeting the 10 per cent minimum expenditure requirement for 2008–09.

Only 2008–09 information is available for this report as annual returns for scheme participants will not be finalised until December 2010.

In 2008–09, there were 19 subscription television drama channels for which reports relating to the scheme were received. *The Broadcasting Services Act 1992* defines a subscription television drama service as a service devoted predominantly to drama programs, that is, more than 50 per cent of the programming consists of drama programs.

Annual returns for the 2008–09 period were also provided by seven licensees. All channel providers complied with the rules of the scheme, and six of the seven licensees complied. One licensee failed to meet their obligation to arrange their eligible expenditure to acquit their 2007–08 expenditure shortfall.

Based on total spending on all programs, an expenditure obligation of \$25.98 million on new eligible drama programs was established for subscription television drama channel providers and licensees in 2008–09.

In the 2009–10 financial year, licensees and channel providers must spend a minimum of \$11.30 million to acquit the 2008–09 obligation.

Australian documentaries

Commercial television broadcasters are required to broadcast at least 20 hours of first-release Australian documentary programs per year. All commercial television stations met the minimum first-release Australian documentary requirements in the 2009 calendar year:

- > Seven Network recorded an average of 113.07 hours across its markets in the five mainland state capital cities
- > Nine Network recorded an average of 47.67 hours across its markets in Brisbane, Melbourne and Sydney
- > Network Ten recorded an average of 38.0 hours across its markets in the five mainland state capital cities.

Expenditure on Australian documentaries

In 2008–09, the commercial television industry spent \$26.7 million on Australian documentary programs, an increase of \$13.3 million, or 98.3 per cent, from the previous year. Commercial television licensees report on the level of expenditure on Australian documentary programs by financial year, whereas data on the number of hours of Australian documentary programs broadcast is provided by calendar year.

Table 4.10 Expenditure on documentaries by commercial television licensees by financial year

Type of programming	2004–05 \$m	2005–06 \$m	2006–07 \$m	2007–08 \$m	2008–09 \$m	2007–08 to 2008–09 % change
Documentary	9.2	12.4	9.0	13.4	26.7	98.3%

Note: Any discrepancies in the totals are due to rounding.

Source: ACMA Broadcasting Financial Results 2008–09.

Children's programs on commercial television

The Children's Television Standards 2005 (CTS) were designed to provide children less than 14 years of age with access to quality television programs made specifically for them, including drama and non-drama programs. The CTS regulated the content, timing and scheduling of children's programs and of non-programming material such as advertisements and promotions shown before, during and after these programs. In conjunction with the Australian Content Standard, the CTS also provided children with television programs that reflect their cultural experience.

Quotas for children's television programs

The CTS provide for an annual children's program quota of 390 hours comprising:

- > 260 hours of children's (C) programs
- > 130 hours of children's preschool (P) programs.

The Australian Content Standard sets out additional annual first release and C drama requirements within these quotas. In the 2009 calendar year, all commercial television broadcasting licensees met the annual quotas for children's programs. Table 4.11 contains details of broadcast data for children's programs by commercial television licensees in 2009.

Table 4.11 Children's and preschool children's programs, 2009

Quota	Australian children's C drama		Australian children's C programs	Children's C programs	Australian preschool P programs
Run	First release	Repeat	First release	All	All
Measure	Total annual hours	Total annual hours	Total annual hours—includes C drama	Total annual hours—all C programs	Total annual hours
Minimum annual requirement	25	8	130	260	130
Seven licensees					
SAS Adelaide	45.50	81.10	130.00	261.60	130.50
BTQ Brisbane	45.50	81.10	130.00	261.60	130.50
HSV Melbourne	45.50	81.10	130.00	261.60	130.50
TVW Perth	45.50	81.10	130.00	261.60	130.50
ATN Sydney	45.50	81.10	130.00	261.60	130.50
Nine licensees					
QTQ Brisbane	32.00	59.00	131.00	265.00	130.50
GTV Melbourne	32.00	58.50	131.00	265.00	130.50
TCN Sydney	32.00	59.00	130.50	265.50	130.50
Ten licensees					
ADS Adelaide	26.50	44.50	131.50	262.50	130.50
TVQ Brisbane	26.50	44.50	131.50	261.00	130.50
ATV Melbourne	26.50	44.50	131.50	261.00	130.50
NEW Perth	26.50	44.50	131.50	263.50	130.50
TEN Sydney	26.50	44.50	131.50	261.00	130.50

Note: Any discrepancies in the totals are due to rounding. All years are calendar years.

Source: The ACMA.

The Australian Content Standard also requires that at least 96 hours of C programs over the three-year period from 2009 to 2011 be first-release Australian C drama programs. All free-to-air commercial television broadcasting licensees are required to meet this minimum hours requirement over the period.

Expenditure on children's programs

Commercial television licensees reported spending \$22.5 million on children's programming in the financial year to 30 June 2009, a decrease of 15.1 per cent from the previous reporting period.

Of the total expenditure on children's programming during 2008–09, children's drama accounted for \$12.7 million (a decrease of 17.9 per cent from the previous year), while other children's programming decreased by 11 per cent and accounted for \$9.8 million of the total expenditure. Table 4.12 provides a breakdown of expenditure by television licensees on children's programming.

Table 4.12 Expenditure on children's programming by commercial television licensees by financial year

Market	2004–05 \$m	2005–06 \$m	2006–07 \$m	2007–08 \$m	2008–09 \$m	2007–08 to 2008–09 % change
Children's drama	13.4	15.3	12.3	15.5	12.7	–17.9%
Children's programming other than drama	8.1	5.6	12.1	11	9.8	–11%
Total	21.5	20.9	24.4	26.5	22.5	–15.1%

Note: Any discrepancies in the totals are due to rounding.

Source: ACMA Broadcasting Financial Results 2008–09.

Children's Television Standards

The ACMA finalised its review of the CTS in 2009–10 and determined the Children's Television Standards 2009, with the substantive obligations taking effect on 1 January 2010. The new CTS took into account two rounds of submissions, issues of concern to broadcasters and the community and a significant body of research. During its consultation, the ACMA received 129 submissions from interested parties.

The new provisions in the CTS include strengthened advertising restrictions during children's programs in relation to endorsements or promotions by popular characters, and ensuring the use of premium offers (such as toys) is merely incidental. A 'block programming' option was introduced, allowing broadcasters the opportunity to broadcast part of the C quota in larger blocks of time each week, rather than over smaller timeframes each weekday. In addition, more specific requirements have been introduced, requiring broadcasters to notify audiences if they depart from their notified broadcasting schedules for C and P programs.

Australian advertising

The Television Program Standard 23—Australian Content in Advertising requires at least 80 per cent of the total advertising time broadcast by commercial television licensees each year between 6.00 am and midnight to be used for Australian-produced advertisements. Exemptions apply to advertisements for imported cinema films, videos, recordings, live appearances by overseas entertainers, and paid community service announcements for organisations that have a charitable, public health or educational purpose.

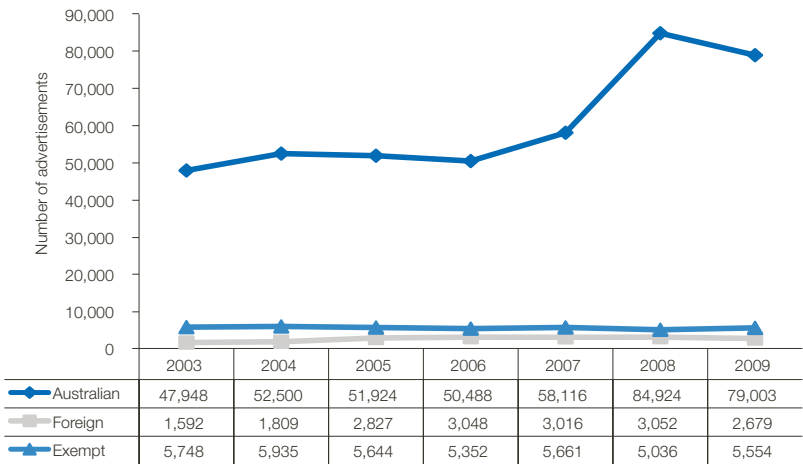
Advertisements are classified as Australian or foreign by Commercials Advice Pty Ltd (CAD), which is wholly owned by Free TV Australia. CAD classification data, together with reports from the commercial television licensees, is used to monitor trends in Australian and foreign content in advertising. The ACMA publishes annual reports on compliance with the standard on its website. The retail, entertainment, and motor vehicle industries comprised the top three product categories for Australian advertisements classified in 2009. This is consistent with the top three categories since 2005. The top three product categories for foreign advertisements classified in 2009 were for:

- > communications and business (including mobile phone content providers and computer companies)
- > retail
- > leisure and outdoor.

In 2008, motor vehicles were in the top three product categories for foreign advertisements classified, in place of retail.

The total number of advertisements classified declined by seven per cent during 2009. A total of 79,003 Australian, 2,679 foreign and 5,554 exempt advertisements were classified in the 2009 calendar year, compared respectively with 84,924 Australian, 3,052 foreign and 5,036 exempt advertisements during 2008 (Figure 4.1).

Figure 4.1 Australian and foreign advertisements classified by CAD by calendar year



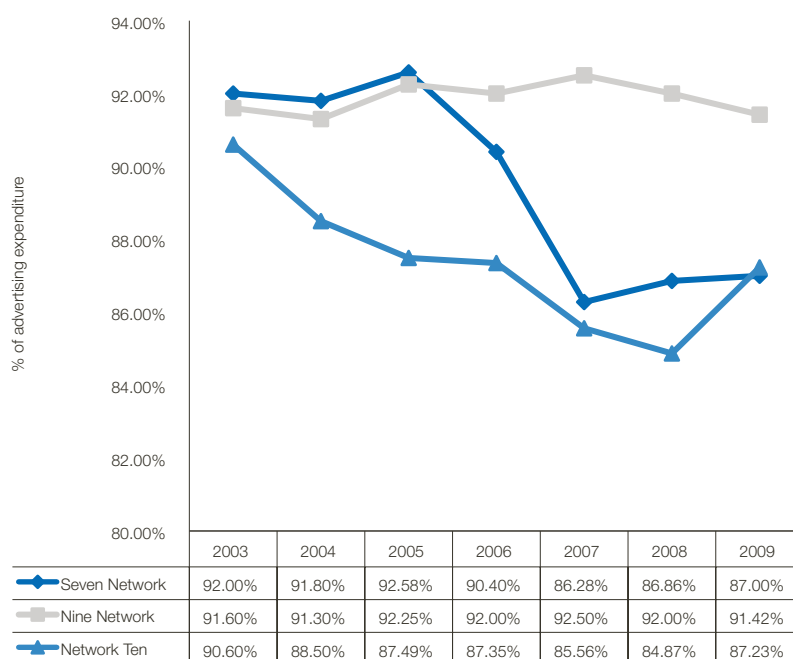
Source: CAD.

Figure 4.2 shows that all free-to-air television stations broadcast more than the required 80 per cent of Australian advertising in the 2009 calendar year, with average national percentages per network of:

- > 87.00 per cent for the Seven Network for its markets in the five mainland state capital cities
- > 91.42 per cent for the Nine Network for its markets in Brisbane, Melbourne and Sydney
- > 87.23 per cent for Network Ten for its markets in the five mainland state capital cities.

Between 2003 and 2009, foreign advertising has averaged well under the maximum allowable 20 per cent for each year.

Figure 4.2 Australian advertising expenditure by major television broadcasters by calendar year



Source: CAD.

Access to broadcasting services for people with disabilities

Equitable access to basic communication services for all Australians includes a requirement for the provision of tailored communications services for people with disabilities. Government regulation requires free-to-air television broadcasters to transmit captions to help people with hearing impairments access television programming.

Captioning

Free-to-air television

The BSA requires commercial and national television broadcasters to provide captions for:

- > all programming broadcast between 6.00 pm and 10.30 pm
- > all news and current affairs.

Under the *Disability Discrimination Act 1992* (the DDA), service providers must make their services accessible to people with a disability. The Australian Human Rights Commission has granted the national broadcasters, as well as the metropolitan and major regional commercial broadcasters, temporary exemptions until 31 December 2011 from complaints about captioning under the DDA. The exemptions require an incremental phased-in increase in captioning up to 85 per cent of content broadcast during the 6.00 am to midnight period.

Some television programs are exempt from this requirement. They include those that are not in English, those that consist only of non-vocal, incidental or background music, and those broadcast on a standard definition television (SDTV) or high definition television (HDTV) multi-channel during the simulcast period (unless previously broadcast with captions on the broadcaster's core channel).

From 1 January 2007, commercial television broadcasters were able to provide a HDTV multi-channel. From 1 January 2009, they were also able to provide one SDTV multi-channel.

The ACMA is committed to ensuring that all Australians have access to quality electronic media. To that end, the ACMA expects to facilitate a captioning workshop with all relevant stakeholders in the next reporting period to encourage discussion on the provisions of captioning services that meet the needs of Australia's deaf and hearing impaired community.

Media access review

In April 2008, the Minister for Broadband, Communications and the Digital Economy released a discussion paper as part of an investigation into access to electronic media by people with a hearing or vision impairment.

The Australian Government carefully considered the submissions received and has developed possible approaches to address the key issues raised in the submissions.

In late 2009, the Department of Broadband, Communications and the Digital Economy (DBCDE) published a discussion report outlining the approaches being considered by the government. Submissions and further views were invited in relation to the appropriateness and effectiveness of these proposed approaches. Submissions closed on 29 January 2010.

The government is considering all the submissions received in relation to the possible approaches in developing its final report on access to electronic media by the hearing and vision impaired.

Notification of changes in control

Commercial television and radio licensees and publishers of associated newspapers are required to notify the ACMA of any changes in control within five days of becoming aware of those changes. People who come into a position to exercise control of such licences and associated newspapers are also required to notify the ACMA within five days of becoming aware of the change in control.

The ACMA updates the Register of Controlled Media Groups when it is notified of relevant changes in control. An unacceptable media diversity situation will arise if there are fewer than five points in any metropolitan commercial radio licence area or fewer than four points in any regional commercial radio licence area. In general, each registrable media group constitutes one point, as does each separate media operation that is not part of a registrable media group.

An unacceptable three-way control situation exists if a person is in a position to exercise control of a commercial television licence, a commercial radio licence and an associated newspaper in the one commercial radio licence area.

Compliance with legislative requirements

In the reporting period, two formal warnings were given which demonstrated a marked improvement in compliance with notification requirements in the 2009–10 financial year.

Local information on regional television

Media ownership amendments to the BSA included provisions affecting the obligation to provide local information on regional television, as outlined below.

As part of the media ownership amendments, the *Broadcasting Services Amendment (Media Ownership) Act 2006* required the ACMA to impose a licence condition from 1 January 2008. The condition specifies a minimum level of material of local significance for Tasmanian commercial television broadcasting licensees, as well as for those mainland licensees in regional Queensland, New South Wales and Victoria previously subject to such requirements.

For the period 19 July 2009 to 30 January 2010, all licensees in Queensland, New South Wales, Victoria and Tasmania (with the exception of Tasmanian Digital Television) reported that they met the weekly and six-weekly minimum quota requirements of 90 points and 720 points respectively.

For the period 1 January to 31 December 2009, TDT reported that it met its 120-point quota requirement.

Local information on regional radio

From April 2007 to June 2010, there were 89 licences affected by trigger events. In the period July 2009 to June 2010, 12 regional commercial radio broadcasting licences were affected by trigger events. Four local content plans were approved and registered in the period July 2009 to June 2010. Variations to 17 approved local content plans were approved during the same period. Where a further trigger event occurred before a draft local content plan had been approved, the draft was refused.

Anti-terrorism standards

In December 2008, the ACMA determined the Broadcasting Services (Anti-terrorism Requirements for Open Narrowcasting Television Services) Standard 2008 and the Broadcasting Services (Anti-terrorism Requirements for Subscription Narrowcasting Television Services) Standard 2008 (the Anti-terrorism Standards). The 2008 standards revoked and replaced the earlier 2006 standards. The standards have addressed a significant community concern by aiming to prevent the broadcast of programs that directly attempt to recruit people or solicit funds for terrorist organisations.

Investigations into compliance with the anti-terrorism standard

In 2009–10, the ACMA conducted two investigations, the first under the Broadcasting Services (Anti-terrorism Requirements for Open Narrowcasting Television Services) Standard 2006 and the second under the Broadcasting Services (Anti-terrorism Requirements for Subscription Narrowcasting Television Services) Standard 2006:

- > The ACMA found content broadcast by the open narrowcasting television satellite service Al-Manar Television from 28 August to 5 September 2008 did not breach section 6 of the Broadcasting Services (Anti-terrorism Requirements for Open Narrowcasting Television Services) Standard 2006. While the ACMA found references in some program content to a designated terrorist organisation (Hezbollah), no content was found that attempted to *directly recruit* people to join or participate in the activities of Hezbollah, or *solicit funds* for (or assist in the collection or provision of funds for) Hezbollah.
- > The ACMA found content broadcast by the subscription narrowcasting television satellite service Global Tamil Vision (GTV, formerly Tharisanam TV) from 19 August to 28 November 2008 did not breach section 6 and section 7 of the Broadcasting Services (Anti-terrorism Requirements for Subscription Narrowcasting Television Services) Standard 2006. While the ACMA found references in some program content to a terrorist organisation (the Liberation Tigers of Tamil Eelam (LTTE), also known as the Tamil Tigers), the ACMA found no content that attempted to *directly recruit* people to join or participate in the activities of the LTTE, or *solicit funds* for (or assist in the collection or provision of funds for) the LTTE.

In 2010, the ACMA commenced a further investigation into content broadcast into Australia by the Al-Manar Television service. The terms of reference for the investigation were published on the ACMA website in February 2010. The investigation is examining a broad selection of daily Al-Manar Television programming, as well as assess specific content that has either been referred to the ACMA, or which the ACMA decides is of particular interest due to the regulatory issues raised.

Commercial radio standards

Three program standards determined under subsection 125(1) of the BSA apply to commercial radio licensees:

- > Broadcasting Services (Commercial Radio Current Affairs Disclosure) Standard 2000 (Disclosure Standard)
- > Broadcasting Services (Commercial Radio Advertising) Standard 2000 (Advertising Standard)
- > Broadcasting Services (Commercial Radio Compliance Program) Standard 2000 (Compliance Program Standard).

Investigations into compliance with the commercial radio standards

In 2009–10, the ACMA published two investigation reports identifying breaches of the Advertising Standard by Prime Radio (Cairns—AM) Pty Ltd during *The John Mackenzie Show*. The ACMA found that the licensee did not present advertisements in such a manner that the reasonable listener was able to distinguish them from other program material in *Investigation report 2180* and *Investigation report 2302*. In response to both investigations, the licensee undertook remedial measures and implemented a policy to acknowledge all paid appearances.

Enforcement action against 2UE Sydney Pty Ltd

In July 2009, the Federal Court of Australia ordered Radio 2UE Sydney Pty Ltd (2UE) to pay penalties totalling \$360,000 for breaching a condition of its broadcasting licence set out in clause 8(1)(b) of Schedule 2 of the BSA. This was the first time a court had considered a civil penalty matter under the BSA.

The enforcement action arose following an ACMA assessment of compliance with 2UE's enforceable undertaking and with the Disclosure Standard. The assessment identified 13 instances of breach of the Disclosure Standard in the final two months of the *John Laws Morning Show* broadcast by 2UE in late 2007. Compliance was assessed in *Investigation report 2100 Compliance Assessment Report—Radio 2UE Sydney Pty Ltd* in November 2008.

Review of commercial radio standards

On 18 December 2008, the ACMA announced a comprehensive review of the three commercial radio standards that were determined by the Australian Broadcasting Authority following the Commercial radio ('Cash for Comment') inquiry in 1999–2000.

The review is considering the appropriateness, effectiveness and efficiency of current regulatory arrangements under the commercial radio standards, including the extent to which these achieve their current objects and are consistent with the objects and regulatory policy of the BSA.

In 2009, the ACMA commissioned a program of research to inform the review, which included a survey of commercial radio industry compliance with the Compliance Program Standard. The research findings indicated generally high rates of compliance by licensees with the requirement to develop, implement and maintain a compliance program, and varying rates of compliance with the requisite elements of the compliance program (namely, the provision of formal policies, audits and training).

On 23 February 2010, the ACMA released an issues paper and four related research reports for public comment. During the 12 week consultation period to 14 May 2010, the ACMA held a webcast of a public forum and a series of roundtables with experts from industry and the community. Key issues in the review were discussed, including the need for regulation, the scope of any regulation and how regulation should be put into operation.

In the 2010–11 reporting period, the ACMA will release an options paper and conduct further consultation in the review.

Digital broadcasting

Digitalisation of Australian broadcasting services includes the transition from analog television services to digital terrestrial television broadcasting (DTTB) services and the introduction of digital radio services.

Digital television

On 30 June 2010, the Mildura and Sunraysia licence area in regional Victoria switched over to digital-only free-to-air television broadcasting. The remainder of Australia will follow a rolling timetable, with the last areas to be switched off by 31 December 2013.

Under the National Television Conversion Scheme 1999 and the Commercial Television Conversion Scheme 1999, national and commercial broadcasters are required to simulcast their analog services in digital. All metropolitan digital services have been rolled out, and rollout of digital services in regional and remote areas is progressing, as set out in Table 4.13.

The completion of the digital television switchover will mean the cessation of all free-to-air commercial and national analog television broadcasting. The transition to digital means all consumers will need to ensure they have digital receiving equipment to receive free-to-air broadcast television.

Broadcasters are taking advantage of the benefits offered by the transition to digital, with new broadcasting services appearing and more proposed. During the reporting year, a number of new digital free-to-air television channels were launched. The Nine Network's GO! launched on 9 August 2009, the Seven Network's 7TWO began broadcasting on 23 October 2009, and the ABC's ABC3 started on 4 December 2009.

Table 4.13 Percentage of required digital television services rolled out (at 1 July 2010)

	National (%)	Commercial (%)
Metropolitan	100	100
Regional	97	73
Remote	54	5

*Note: Does not include transmission services operated by local communities and other non-broadcasters.
Source: The ACMA.*

As each of the broadcasting services makes the transition to digital, and as new services are introduced, the move to digital becomes more attractive for consumers.

On 4 May 2010, the ACMA allocated new licences to Central Digital Television Pty Ltd for a third, digital-only commercial television broadcasting service in Mt Isa and remote central and eastern Australia. Services under these licences are required to commence within one year of allocation.

Digital commercial television also moved a step closer for viewers in more remote areas of Australia in 2009–10. On 10 June 2010, a third digital-only commercial television service was introduced in regional and remote Western Australia, with digital simulcasting of analog services being progressively extended into the Geraldton, Kalbarrie and Western Zone television licence areas.

To encourage the provision of useful program information to consumers, the ACMA has developed a set of principles and key performance characteristics for electronic program guides (EPG) provided by free-to-air broadcasters as part of their digital television services. The ACMA developed the EPG principles in response to its own concerns and also concerns raised by both industry and the community about the quality of the offerings for EPGs.

The EPG principles set out publicly the characteristics of an industry-provided EPG that will provide an acceptable quality of service from the consumer perspective. In addition to the EPG data being freely available, features such as accurate timing information, a minimum of seven days of schedule information and inclusion of parental guidance ratings to inform families are among the key performance characteristics of the EPG.

The ACMA regularly reports on free-to-air digital television broadcaster performance against the EPG principles. To date, the ACMA's assessment of broadcasters' performance identified no reason to consider use of the ACMA's regulatory powers.

Digital television consumer research

During 2009–10, the number of Australian households that have converted to digital television has increased by 21 percentage points according to research undertaken by DBCDE.⁵ At 30 June 2010, 74 per cent of Australians had converted their main set to digital television, compared with 53 per cent at June 2009.⁶

DBCDE research indicates that while 95 per cent of Australian households are aware of the digital switchover, only three per cent know when it is scheduled for their area. Eighty-two per cent know how to convert to digital television and 68 per cent have converted their main set to digital television. In terms of attitudes towards switchover to digital television, 91 per cent are reported to be positive or neutral and 83 per cent of those with digital television have indicated they are satisfied with the service.⁷

On 30 June 2010, the Mildura and Sunraysia region became the first digital-only region in Australia after analog television transmissions were switched off. Following the switchover to digital television in the Mildura and Sunraysia region, 300 households were interviewed during a two day period from 1–2 July 2010. The survey revealed that 99 per cent of households in the area had converted to digital television, with 10 per cent doing so in the three months prior to switchover.

High definition broadcasting

Under Part 4 of Schedule 4 of the BSA, broadcasters must meet high definition television (HDTV) quota standards. Each commercial or national television broadcasting service in a mainland metropolitan area is required to transmit a quota of 1,040 hours of HDTV programming per calendar year. The HDTV obligations also apply to a number of broadcasters in non-remote areas. The ABC and SBS are permitted to ‘up-convert’ their analog or standard definition television (SDTV) programs to HDTV.

Broadcasters required to meet the HDTV quota must report compliance information to the ACMA twice a year. Interim reports must be provided for the first six months of the calendar year, followed by consolidated reports for the full 12 months. Records must be kept for 18 months after the transmission was first reported to the ACMA.

In the 2009 calendar year, the commercial and national television broadcasters required to transmit the HDTV quota complied. The compliance results of national and commercial television broadcasters in the mainland metropolitan areas are in Table 4.14.

Table 4.14 High definition television quota compliance, 2009

Broadcaster	HDTV hours (range)
ABC	8,473:00
SBS	8,015:37
Seven Network	2,514:45–2,569:42
Nine Network	3,413:05–3,495:57
Network Ten	3,358:17–3,392:45

Source: The ACMA.

Digital radio

Digital radio transmissions using the DAB+ standard officially commenced in Adelaide, Brisbane, Melbourne, Perth and Sydney on 1 July 2009. From this date, commercial and national radio broadcasters provided digital radio services. These services are being provided in addition to analog services. Designated community radio broadcasters in these areas are also eligible to begin digital broadcasting, but have not yet started. VHF Band III spectrum, the same spectrum currently used for analog and digital television, is being utilised to deliver digital radio services.

Broadcasters share digital transmission infrastructure (multiplexes) to deliver DAB+ services. At digital radio start-up, each commercial radio broadcaster was allocated 128 kbps of multiplex capacity, which allows each broadcaster to deliver two FM quality music services or four voice-only services. On 27 November 2009, the excess capacity on each multiplex was auctioned by the multiplex licensee. All excess capacity in Adelaide, Melbourne, Perth and Sydney was successfully sold (to commercial radio broadcasters), while 128 kbps of multiplex capacity in Brisbane was being passed in (not sold) at auction. Brisbane, Melbourne and Sydney (licence areas with two multiplexes each) have more than 30 DAB+ commercial and national radio services. Adelaide and Perth (licence areas with one multiplex each) have more than 20 DAB+ commercial and national radio services.

In the first year of DAB+ services, broadcasters have delivered new digital-only radio services including Austereo's *Radar Radio*, DMG's *Nova Nation* and Broadcast Operations' *Gorilla Radio* (only in Sydney). Short-term digital-only 'event-based' services have also been popular. For example; Austereo's *Pink Radio* during the national Australian tour of pop music artist Pink, ABC's *Melbourne Festival Radio* to support the Melbourne International Arts Festival and SBS' *EuroVision* to support the EuroVision song contest.

Other broadcasting services

3D television trials

In April 2010, the ACMA received applications from both SBS and the Nine Network to conduct trials of 3D television using an unassigned television channel. Following negotiations between the broadcasters, the ACMA approved a single combined trial for a two month period from 19 May to 19 July 2010. The 3D television trials were broadcast in digital mode by SBS in Sydney, Adelaide and Perth and by the Nine Network in Melbourne, Brisbane, Newcastle (NBN Ltd), and Wollongong (WIN Television). Each trial carried both SBS and Nine services. Viewers in these locations accessed the trial through logical channel number 40 on a 3D-enabled digital television set.

The licences allowed the trial operators to test new radiocommunications technologies by broadcasting 3D high definition television to viewers with access to 3D-enabled digital television receivers. The trials included live telecasts of the three State of Origin rugby league matches and World Cup 2010 matches.

Datacasting trial

On 30 April 2010, the datacasting trial licence issued to Broadcast Australia ended. The trial datacasting service had been licensed since 2003 and operating on one of the two unassigned digital television channels in Sydney.

The ACMA is able to temporarily allocate available unassigned broadcasting services band (BSB) spectrum under section 34 of the BSA. One of the purposes for which such spectrum can be allocated is conducting temporary trials of new radiocommunications technologies. This decision to terminate the trial was made after two key government announcements regarding the unassigned television channels. Firstly, the government announced a 'digital pathway for community television' which commits one of the unassigned television channels in Sydney to community television until 2013. Secondly, the DBCDE released the *Digital dividend green paper* which proposes that the other unassigned television channel be packaged as part of the digital dividend.

Broadcasting complaints

Broadcasting industry codes

The BSA requires industry groups responsible for representing the various broadcasting industries to develop, in consultation with the ACMA, codes of practice applicable to that section of the industry. Various sectors of the broadcasting industry, including the national broadcasters (ABC and SBS), have codes of practice that cover most aspects of program content, including:

- > classification (the portrayal of violence, sex and nudity, language, drugs and suicide)
- > discriminatory material
- > accuracy and fairness in news and current affairs
- > handling of complaints.

The ACMA registers broadcasting industry codes under section 123 of the BSA. While the ACMA investigates complaints about non-compliance with the codes of the two national broadcasters, it does not register their codes.

Broadcasting code complaints and investigations

The ACMA provides an escalated complaints-handling mechanism for matters relating to broadcasting codes. The ACMA is required to investigate complaints about broadcasters (made under section 148 of the BSA) that relate to possible non-compliance with a registered code, if the complainant:

- > has first directed their complaint to the relevant broadcaster in accordance with the relevant code
- > considers the broadcaster’s response to be inadequate or has not received a response within 60 days.

Complaints about alleged breaches of the BSA, licence conditions or standards may be made directly to the ACMA. The ACMA must investigate complaints validly made under section 147, section 148 or section 150 of the BSA, unless one of the exceptions provided for in subsection 149(2) applies.

Broadcasting code complaints and investigations 2005–06 to 2009–10

The ACMA tracks the number and details of complaints it receives by phone and in writing, including those made using a complaint form available on the ACMA website or via email. The total number of telephone and written complaints and enquiries shows an increase of 16 per cent on 2008–09, while the number of investigations completed decreased by two per cent. Complaints received do not necessarily progress into investigations, either because the complainant chooses not to pursue the matter further or because the complaints are outside the ACMA’s jurisdiction.

The ACMA also reports annually on the number and details of investigations completed. The number of investigations completed in 2009–10 was 189. The number with breach findings was 74. There was no significant difference on 2008–09 figures.

Table 4.15 ACMA broadcasting complaints and investigations by financial year

	2005–06	2006–07	2007–08	2008–09	2009–10
Telephone complaints	578	444	429	308	385
Written complaints	737	886	789	1,464	1,676
Investigations completed	142	136	136	194	189
Investigations resulting in breach finding	34	45	47	80	74
Investigations resulting in non-breach finding	108	91	89	109	111

**Investigations resulting in breach/non-breach findings does not equal total number of investigations completed due to exclusion of completed investigations with no funding, for example where the complaint is withdrawn.*

Note: Sum of categories does not equal total number of investigations completed due to exclusion of completed investigations with no finding, for example where the complaint is withdrawn.

Source: Broadcasting complaints to the ACMA.

Investigation of complaints about online content

Under Schedules 5 and 7 of the BSA, the ACMA investigates all valid complaints about online content, such as websites, newsgroup postings and content made available over peer-to-peer file sharing networks, where the complainant considers that the content may be prohibited.

Online content is assessed by way of reference to the National Classification Scheme as the BSA determines prohibited content to be content that is classified RC (Refused Classification) and X18+. Content classified R18+ is prohibited if not subject to a restricted access system. Content classified MA15+ is prohibited if it is provided by a mobile premium service and not subject to a

restricted access system. Online video and audio content classified MA15+ will also be prohibited if it is provided on a commercial basis, not provided by a news and current affairs, or ancillary subscription service and not subject to a restricted access system. Content that has not been formally classified by the National Classification Board but has been determined by the ACMA as likely to be prohibited content if it were, is termed potential prohibited content under the BSA.

During 2009–10, the ACMA received 3,212 complaints about 3,828 items of online content. These complaints resulted in 2,782 completed investigations at 30 June 2010. This compared with 1,182 complaints received and 1,003 investigations completed at 30 June 2009.

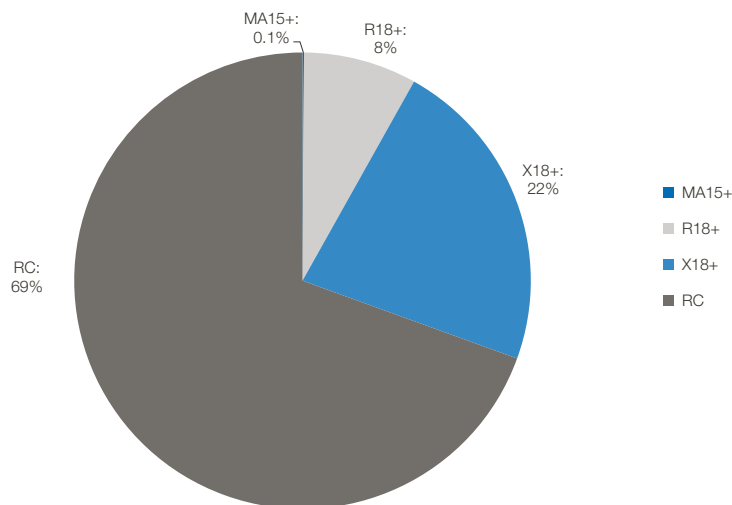
The increase in complaints received by the ACMA is likely due to a range of factors including:

- > an increased number of Australian families who are online
- > greater awareness of the potential dangers of harmful content
- > increased awareness of how to report suspected prohibited content
- > greater community interest in online content regulation issues and the role of the ACMA in this area.

A total of 1,328 completed investigations resulted in the location of 1,932 individual items of prohibited/potentially prohibited online content.

Since 2000, when Schedule 5 of the BSA took effect, the ACMA has received more than 11,000 complaints and taken action on more than 8,500 individual items of prohibited and potential prohibited content. Figure 4.3 shows the breakdown of items actioned by their actual or likely classification.

Figure 4.3 Prohibited/potential prohibited content items actioned by actual/likely classification, January 2000 to June 2010



Note: Percentages do not add up to 100 per cent due to rounding.

For full classification and description of online content see p15 ACMAsphere Issue 57—October 2010 www.acma.gov.au/WEB/STANDARD/pc:PC_9030.

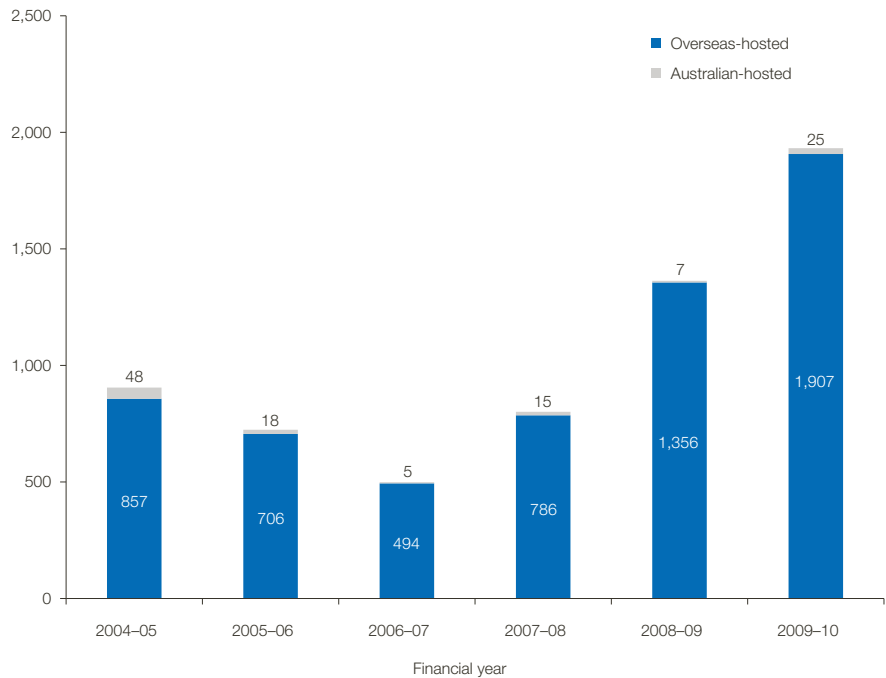
Source: Online content complaints actioned by the ACMA.

If potential prohibited content is hosted in or provided from Australia, the ACMA must direct the content service provider to remove or prevent access to the content. If potential prohibited internet content is hosted overseas, the ACMA must notify the suppliers of filters which have been tested and accredited by the Internet Industry Association (IIA), as part of the IIA's Family Friendly Filter scheme, in accordance with the procedure set out in the registered industry code of practice, to block access to the content for users of those filters (Figure 4.4).

During 2009–10, notices to remove content were issued for 25 items of Australian-hosted prohibited content. No link-deletion or service-cessation notices were issued in relation to links services or live content services provided from Australia. A total of 1,907 overseas-hosted prohibited or potential prohibited items were referred to suppliers of industry-accredited filters.

Approximately 98.7 per cent of potential prohibited content investigated by ACMA is hosted outside Australia. The predominance of prohibited content and potential prohibited content originating from outside Australia has been a consistent trend over the life of the scheme. Since January 2000, the ACMA has taken action on 8,172 items of overseas-hosted online content, compared with 404 items of Australian-hosted content. Table 4.16 provides data on online content investigations between 2004–05 and 2009–10.

Figure 4.4 Online content items actioned



Source: The ACMA.

Table 4.16 Internet content investigations by financial year

	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	Total
Complaints received*	1,145	826	602	1,122	1,182	3,212	8,089
Investigations completed	814	638	476	775	1,003	2,782	6,488
Investigations terminated†	202	117	55	119	142	175	810
Complaints not investigated‡	149	83	78	132	99	118	659
Investigations leading to finding of prohibited content	575	422	262	475	618	1,328	3,680
Items actioned (hosted in, or provided from, Australia)	48	18	5	15	7	25	118
Items actioned (overseas-hosted)	857	706	494	786	1,356	1,907	6,106

Items referred to state or territory police force	25	10	1	11	2	8	57
Items referred to AFP or INHOPE hotline	582	446	368	415	928	1,059	3,798

* The ACMA investigates all valid complaints about online content. Some complaints result in investigation of multiple items of content. For example, where a complaint is made about multiple postings within a single newsgroup, the ACMA will investigate each posting. Each posting is regarded as one 'item' of content.

† An investigation is terminated when there is insufficient information to conclude it, such as when the ACMA is unable to locate the content based on information provided by the complainant.

‡ A complaint is not investigated by the ACMA if it:

- > does not meet the statutory requirements, for example, no internet address is provided or the complainant is not an Australian resident
- > is deemed to be frivolous, vexatious, not made in good faith or designed to undermine the operation of the scheme
- > concerns matters—for example, electronic virus—not within the scope of Schedules 5 or 7.

Source: Online content complaints actioned by the ACMA.

Further investigation of sufficiently serious content

Where prohibited or potential prohibited online content is deemed 'sufficiently serious'—for example, illegal material such as child pornography—the ACMA refers the material to the appropriate law enforcement agency or affiliated overseas internet hotline. For illegal content hosted outside Australia, the ACMA refers details of the content concerned to the Australian Federal Police (AFP), or if the host country is a member of the International Association of Internet Hotlines (INHOPE), the affiliated INHOPE hotline, for further investigation.

Approximately 60 per cent of items actioned since January 2000 have related to child sexual abuse or paedophilia. The ACMA referred 1,068 items of internet content to law enforcement agencies and/or INHOPE member hotlines in 2009–10. Nine of these items were found to be hosted in Australia and were referred to local Australian state or territory police services. The predominance of referrals of such content to overseas authorities has been a consistent trend over the life of the scheme. Since January 2000, the ACMA has referred 5,102 individual items of content for law enforcement investigation, of which approximately 97 per cent has been referred to overseas authorities or associated INHOPE hotlines.

Endnotes

- 1 The *Broadcasting Financial Results* is based on the data provided by licensees to the ACMA. The data has not been verified or audited by the ACMA and is reported as provided to the ACMA. Therefore, the ACMA makes no representation as to the accuracy of the data.
- 2 These figures are of network revenue as a percentage of total revenue (\$3,784.4 million) which includes revenue of affiliates.
- 3 These results do not include the results for twelve commercial radio licences which do not use the broadcasting services bands (non-BSB radio licences).
- 4 A license failed to acquit \$40,000 of 2007–08 obligation.
- 5 At least the main television set has either an integrated digital tuner or a digital set top box or they view their main television set through a personal video recorder, or similar device, with a digital tuner and hereafter referred to as a 'digital TV recorder'.
- 6 The Department of Broadband, Communications and the Digital Economy, *Digital Tracker Summary Report, Quarter 2, April to June 2010*.
- 7 The Department of Broadband, Communications and the Digital Economy, *Digital Tracker: Summary Report, Quarter 2, April to June 2010*.



Chapter 5

Consumer benefits resulting from telecommunications services

Overview

In this chapter, the ACMA presents a descriptive approach for assessing consumer benefits that seeks to capture the impact of direct and indirect factors related to the use of communications services that underpin increasing participation in the digital economy and the development of social capital.

In the context of the digital economy, social capital encompasses the value that information and communication technology (ICT) usage delivers for people, groups, organisations and communities and how it facilitates greater social and economic interaction and interconnectedness.

In terms of consumer benefits and building social capital through ICT, key developments in 2009–10 include:

- > increasing technological and service innovation enabling flexibility in terms of use of voice and content services across multiple platforms
- > digital communications increasingly intrinsic to social and economic activities as evidenced by changing attitudes towards communications
- > the internet facilitating social and economic activities as shown by the growth in the frequency of internet use, the scope of activities undertaken online and the value of goods and services sold online
- > emergence of online social media facilitating new communication and content channels and user generated content as shown by the increasing popularity of online social networking.

Nevertheless, while the data clearly shows that many consumers are empowered by the access to information and services that the digital economy provides, a significant percentage of Australians (businesses included) are not optimising these benefits. The causes of this are wide ranging and include infrastructure availability, economic and social barriers in addition to low levels of digital media literacy. Understanding the interplay of these factors will be critical for informing consumer benefits reporting in the future.

Chapter summary¹

The use of ICTs has become an integral part of daily life for many Australians, who increasingly rely on services and devices with increased functionality to undertake daily activities in different and more efficient ways. These trends indicate that ICTs are no longer peripheral to people's lives but are a key enabler for interacting with the economy and society of the 21st century.

Increased network coverage and availability has allowed consumers to more effectively access services and has supported the continued adoption of ICTs—particularly growth in mobile phone, internet and VoIP take-up:

- > mobile services—(both voice and data) increased from 24.22 million at June 2009 to 25.99 million at June 2010
- > internet subscribers—increased from 8.4 million reported at June 2009 to 9.6 million subscribers at June 2010
- > wireless broadband subscribers, excluding handset, increasing by 75 per cent compared to a two per cent increase in DSL subscribers during 2009–10
- > use of VoIP—increased from 14 per cent at June 2009 to 16 per cent at June 2010.

The fact that ICT usage has become increasingly important for enabling both work and leisure activities is demonstrated not just by the increase in internet and mobile service usage by people and business, but by the use of multiple technologies to communicate. Australian consumers are increasingly accessing communication services across multiple technologies, matching services to meet specific lifestyle needs—whether social or economic. As a consequence, most people now use a variety of communication services simultaneously, with 58 per cent of adults with a fixed-line telephone using a mobile phone and the internet, and an additional 22 per cent of fixed-line telephone users using a mobile phone, a VoIP service and the internet.

Consumer attitudes towards ICTs also reflect their increased reliance upon and perceived value they place in communication services in both their working and personal lives. Of mobile phone users, 91 per cent agreed that having a mobile phone was instrumental in 'winning new business', 76 per cent agreed that they need a mobile phone to give them more control over their lives and 70 per cent reported that they 'can't live without a mobile phone'.

These attitudes are also reflected by internet users, with 63 per cent of Australians aged 14 years and over regarding the internet as an information channel more so than a tool for entertainment purposes. This is further evidence by the fact that online activities relating to information and research are only second to communications in terms of the most frequently reported activity undertaken online in Australia.

Growth in business reliance on the internet is demonstrated by the increase in websites and domain name registrations under '.au' (excluding '.gov.au'), 1.42 million at June 2009 to 1.76 million domain names at June 2010. SME website ownership has also increased from 56 per cent at June 2009 to 61 per cent at June 2010. On the basis of available ABS data, the value of goods and services sold online by businesses in Australia was approximately \$123 billion during 2008–09 compared to \$81 billion during 2007–08.

The online environment is empowering people through the use of social media and the undertaking of user generated content (UGC) activities, enabling internet users to become both producers and distributors of content. During June 2010, internet users in Australia spent 41.5 million hours accessing social networking sites from home, compared to 32.6 million hours during July 2009. During June 2010, these users also viewed 4.5 billion separate web pages on social networking/UGC sites compared with 3.4 billion pages viewed during July 2009.

Consumer benefits and social capital

Consumer benefits resulting from ICT usage are diffused and extend to both the economic and social spheres.

Social capital refers to the economic and social value that comes from the interaction of people through personal relationships and social networks. The Organisation for Economic Cooperation and Development defines social capital as:

‘networks together with shared norms, values and understandings that facilitate cooperation within or among groups’.²

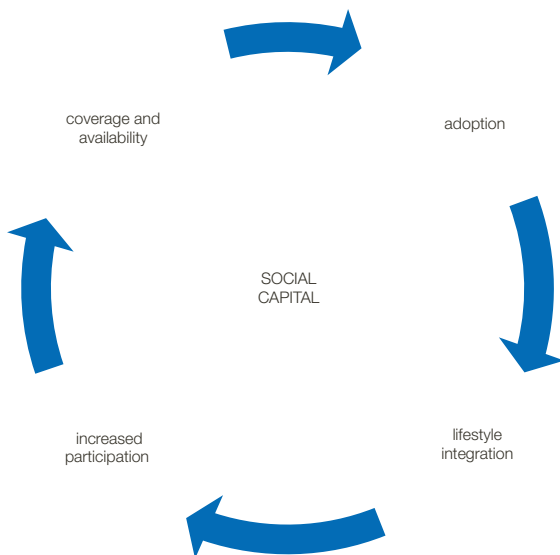
The role ICT usage plays in building social capital has been extensively examined in literature but is not canvassed for the purposes of this report.³ It is important to refer to ICT usage when discussing social capital because it can result in higher levels of trust and personal engagement with people and organisations leading to improved efficiency and personal satisfaction.⁴ In the context of the digital economy, social capital encompasses the value that ICT usage delivers for people, groups and communities and how it facilitates greater social interaction and interconnectedness.

The ACMA’s focus on social capital provides a holistic picture of the impact of communications services on the lives of Australians and the complex reality of the benefits they derive from these services. Based on the social capital approach, the ACMA is reporting on consumer benefits by examining the following key areas:

- > adoption of ICTs
- > coverage and availability (of services and networks)
- > lifestyle integration
- > increased online participation
- > building social capital.

These interconnected factors, which contribute to social capital, are depicted in Figure 5.1.

Figure 5.1 The role of ICT in building social capital



Adoption of ICTs

Table 5.1 Adoption of selected ICT

Key indicators	
Mobile services	25.99 million
Fixed-line telephone services	10.59 million
Internet services	9.57 million
Use of VoIP in home	16% of population (2.9 million people)

Note: June 2010 reference period.

The starting point for considering the value that ICT usage generates for the economy and society is the adoption of a service. Adoption of ICTs is critical for underpinning growth in the digital economy and building social capital as it provides access to a wide variety of services and applications which people need to live and work.⁵

Adoption is also a key component in enabling greater interconnectedness because it facilitates communication between people and organisations. Most Australians are likely to have access to a number of complementary services including fixed-line, mobile, internet and voice over internet protocol (VoIP) services—with each of these generally adopted for different purposes or reasons.

For some years, consumer adoption of ICTs has been driven by more than the need to access a standard telephone service. Consumers now adopt services based on their suitability for undertaking a wide variety of activities. As a result, most Australians are adopting a combination of fixed-line and mobile communication services to meet changing lifestyle needs.

The change in the mix of communications services adopted by Australians is shown by recent consumer take-up trends outlined in more detail in Chapter 1. There has been a slow and consistent decline in the number of fixed-line services since 2003–04 and an increase in the number of other services, such as mobile services—particularly 3G. Total fixed-line subscriber numbers have declined by approximately nine per cent from 11.6 million in 2003–04 to 10.59 million in 2009–10. In the same period, the total number of mobile services (both voice and data) in operation has increased by approximately 58 per cent from 16.48 million in 2003–04 to 25.99 million in 2009–10.

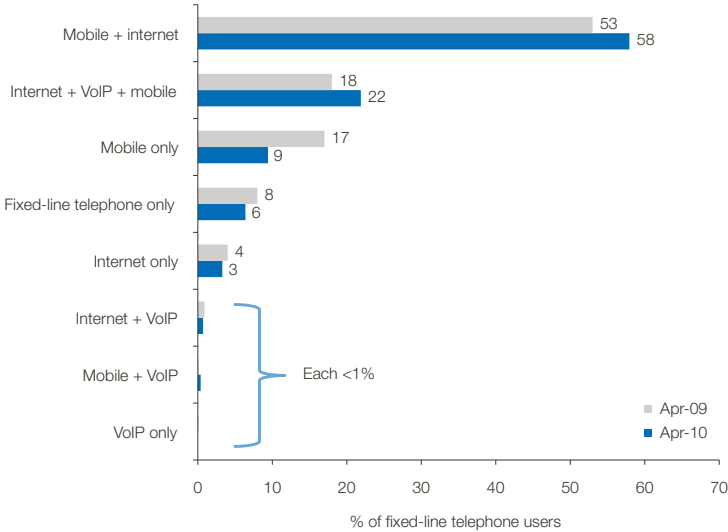
The mix of mobile technologies has also changed, with a significant increase in the number of subscribers for 3G mobile phones following the closure of Telstra's CDMA network in April 2008. Other factors, such as the growth in service offerings by other providers including Optus and Vodafone Hutchison Australia, and the upgrading of network and handset capabilities as evidenced in Chapter 1, have also driven growth in recent years. In 2009–10, more than 60 per cent of all mobile subscribers used a 3G service. A growing number of people—particularly younger people under the age of 34, where mobility and lifestyle requirements (staying in contact with friends, colleagues and family) are important—are choosing to substitute a fixed-line telephone for a mobile phone. At June 2010, 2.1 million Australians aged 14 years and over with a mobile phone, did not have a fixed-line telephone connected at home, compared to 1.6 million at June 2009.⁶

More Australians are utilising some form of broadband service, with the Australian Bureau of Statistics (ABS) reporting that at June 2010, there were 9.57 million internet subscribers in Australia, up from the 8.42 million reported at June 2009, with 92 per cent internet subscribers utilising broadband at June 2010.⁷

The use of VoIP services also continues to grow, with 16 per cent of the population aged 14 years and over using some form of VoIP service at home as at June 2010.⁸ The continued growth in social media channels such as online social networking has also provided alternative communication channels to traditional voice services. This has provided Australian consumers with a growing array of communication choices.

As a result, Australians have responded by matching services to meet specific lifestyle needs—whether social or economic. Figure 5.2 presents an overview of how Australian communication consumers in fixed-line households are combining communication services. The data shows that Australian consumers are increasingly accessing communication services across multiple technologies.

Figure 5.2 Communication service combinations by household consumers with a fixed-line telephone



Source: ACMA-commissioned survey, April 2010.

Key factors driving the adoption of ICTs are network coverage and the growing functionality of ICTs. These factors allow people to access both fixed and mobile networks to undertake a range of communication activities both inside and outside the home.

Network coverage and services functionality

Table 5.2 Network coverage and services functionality

Key indicators

Population covered by mobile networks	3G networks 99.09% GSM networks 96.22%
Number of service providers	306 fixed line service providers (includes ISPs, resellers, mobile virtual network operators) 3 mobile network operators all offering 2G and 3G networks
Increased functionality of mobile devices	voice, internet access, GPS, SMS, email, video, data

Note: June 2010 reference period.

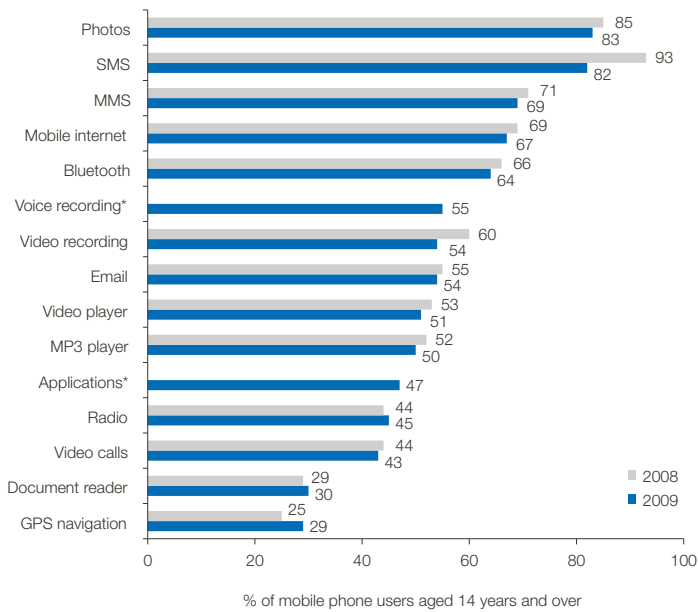
The high population coverage of both fixed and mobile networks is a key factor driving the take-up and usage of communications services. The universal service obligation (USO) requires that the standard telephone service is available to all Australians, no matter where they live or work. The population coverage of mobile networks has matured with GSM and 3G mobile networks covering 96.22 per cent and 99.09 per cent of the population respectively at June 2010.⁹

The fixed-line market offers Australians a wide variety of service providers and service offerings. In June 2010, there were 306 fixed line telephone service providers operating in Australia, of which 89 offered PSTN and VoIP services.¹⁰ There are also three mobile network operators in Australia: Telstra, Optus and Vodafone Hutchinson Australia, which all operate 2G and 3G networks.

Fixed and mobile access networks have evolved to support both voice and data services, representing a shift from a single to a multi service provider model. Fixed-line service networks provide internet access using a mix of technologies including dial-up, digital subscriber line (DSL) and hybrid fibre coaxial (HFC) cable. At June 2010, 44 per cent of internet subscribers in Australia used DSL. Mobile broadband—excluding handset broadband—accounted for 36 per cent.¹¹

For many consumers, the mobile is complementary to a fixed-line service. Mobile phones today are multifaceted devices that consumers use in many aspects of their lives whether they are at home or on the move. The new generation of ‘smartphones’ has transformed the mobile into a truly converged consumer device, with the latest models offering an array of services including voice, SMS, internet access, electronic payments, email, video, music, photography and access to social media. This is shown in detail in Figure 5.3, which provides an overview of the changing functionality of mobile devices available to consumers in Australia.

Figure 5.3 Increasing functionality of mobile devices



Note: * 2008 data for these variables is not available.
Source: Nielsen, Australian Internet and Technology Report, February 2010.

The increasing application of ICTs to service delivery together with increased network coverage and availability has enabled people to more effectively integrate ICT into their daily lives.

Lifestyle integration

Table 5.3 Lifestyle integration

Key indicators

Commonly used communication services	voice, SMS, internet
Consumer attitudes to services	consumers need ICTs for time management, business, personal security
Critical services	ICTs such as the internet critical for a range of social and economic activities such as research and information, entertainment, electronic payments

Note: June 2010 reference period.

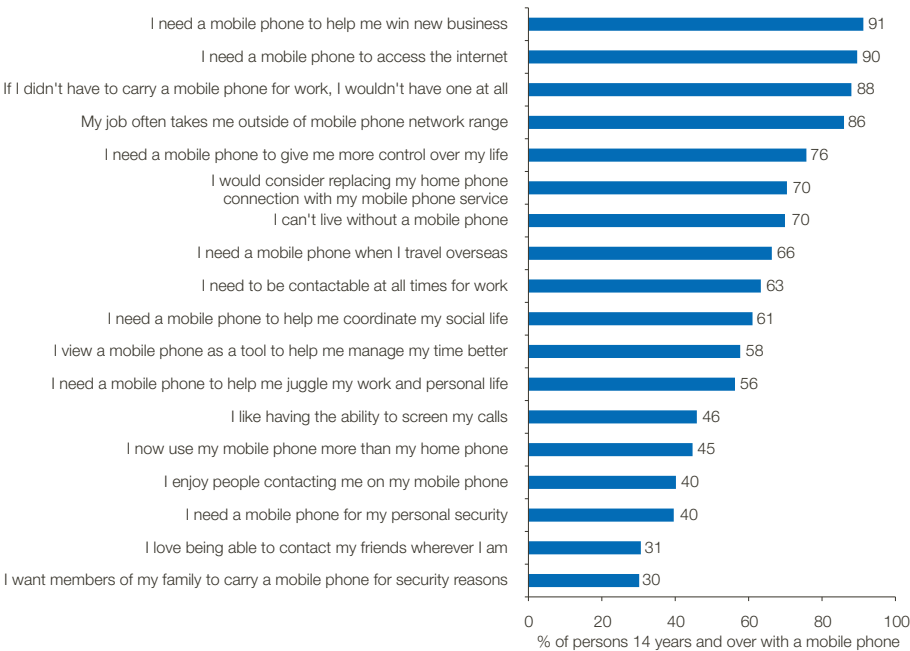
Consumers have seamlessly integrated ICTs into their daily lives and rely on them to undertake many everyday activities in different and more efficient ways. This is a key source of benefit for consumers and contributes to the growth of social capital.

Some of the most commonly used ICT services have become the tools that facilitate what many see as ‘21st century living’. For example, most consumers use their SMS and voice calls on their

mobile phones to keep in contact and manage their time.¹² In addition, the increased functionality of mobile phones is also changing the range of activities consumers undertake using mobile access platforms. For example, up to 15 per cent of people report accessing the internet on their mobile phone, and up to 20 per cent report using MMS.¹³

Consumers value ICTs highly and see them as important for both their working and personal lives. For example, 91 per cent of mobile phone users aged 14 years and over agreed with the proposition that having a mobile phone was instrumental in ‘winning new business’, 76 per cent agreed that they need a mobile phone to give them more control over their lives and 70 per cent reported that they ‘can’t live without a mobile phone’.¹⁴ A further 58 per cent of consumers agreed that a mobile phone is required to manage time better.¹⁵ See Figure 5.4 for the wide range of attitudes Australian consumers express towards mobile telephony.

Figure 5.4 Australian consumer attitudes to mobile phones, June 2010



Source: Roy Morgan Single Source, June 2010.

These attitudes, collectively, reflect the fact that the mobile phone is not peripheral but increasingly intrinsic to the social and economic well-being of many Australians. As mobile phones are able to offer more services to consumers, such as electronic payments (e-payments) and mobile internet, reliance is more likely to become more ingrained. These attitudes are also reflected towards use of the internet with 63 per cent of Australians aged 14 years and over regarding the internet as an information channel more so than a tool for entertainment purposes.¹⁶

These attitudes are further reflected in the increasing reliance people place on communications services such as the internet, as evidenced in the growing frequency of online participation and the increasing scope of activities undertaken online.

Increased online participation

Table 5.4 Increased online participation

Key indicators	
Online participation	89% of population having ever used the internet

Intensity of online use	heavy users (<15 hrs per week)	28%
	medium users (7–15 hrs per week)	27%
	light users (up to 7 hrs per week)	23%
	no use of the internet (during an average week)	22%
Top five activities undertaken via the internet	communications, research, banking and finance, general browsing, entertainment	
Volume of data downloaded	155,503 terabytes during June quarter of 2010	

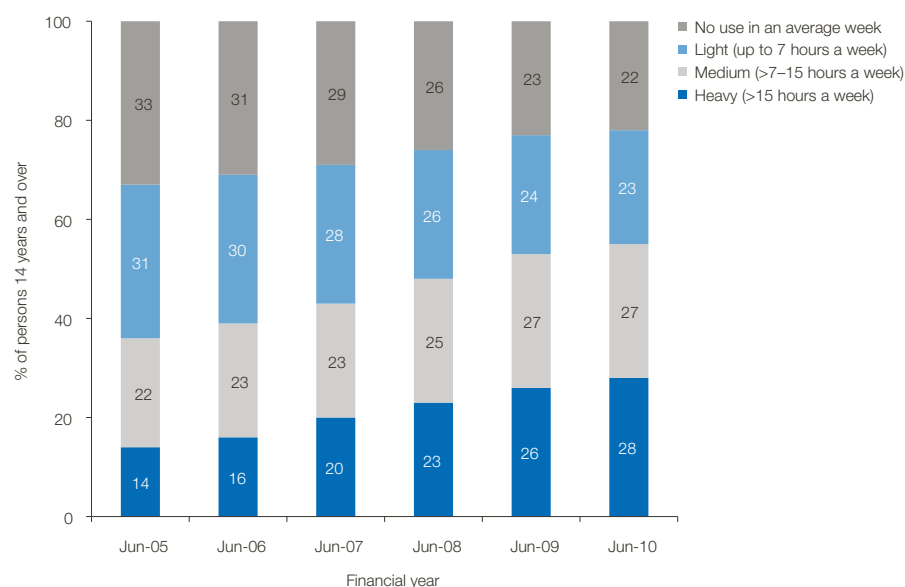
Note: June 2010 reference period.

The integration of ICTs, such as mobiles and the internet, into the everyday lives of Australian consumers is increasing participation in the digital economy.

Access and usage of the internet is now a mainstream activity. In 2009–10, the proportion of the population that accessed the internet was 89 per cent and the proportion of the population with a broadband connection was 66 per cent.¹⁷

Increased access is leading to growing intensity of online participation in Australia as demonstrated by the ongoing shift to more frequent use of the internet (Figure 5.5). The frequency of internet use (going online at least on a weekly basis) in Australia increased across all age groups. During the last five years, the proportion of heavy internet users (online for more than 15 hours a week) in the Australian population has doubled, and was the highest proportional increase across the levels surveyed. Research shows that the increase has occurred across all age groups, with the increase in the proportion of the population identified as heavy internet users, ranging from five per cent for persons aged 65 years and over to 23 per cent for 18–24-year-olds, during the period June 2005–June 2010.¹⁸

Figure 5.5 Levels of internet use in an average week



Note: Average week is self defined by respondent.

Source: Roy Morgan Single Source, June 2010.

The growth in knowledge of the online environment, as well as the integration of ICTs into everyday life, is demonstrated by the increasing amount of time that users are spending online. There is also a strong correlation between increased frequency of use and greater use of online services and applications. The take-up and integration of ICTs into people's lives have both direct and indirect value for the economy and society. This includes the growth in online commerce as well as increased interconnectedness for people.

Another measure of the growing importance of the internet to Australians is the amount of information and data downloaded online. The ABS reports that, during the June quarter of 2010 alone, internet subscribers in Australia downloaded 155,503 terabytes of data, compared to 99,249 terabytes of data downloaded during the June quarter of 2009, a 57 per cent increase.¹⁹

Building social capital

Table 5.5 Building social capital

Key indicators	
Commercial web presence	61% of SMEs connected to the internet owned a website at June 2010
	1.76 million '.au' domain names registered at June 2010
Income derived by businesses from sale of goods and services via the internet	\$123 billion during 2008–09
Consumer and citizen empowerment through online social networking	8.7 million Australians accessed online social network sites such as Facebook and YouTube from home during June 2010, compared to 8.3 million during July 2009.

Note: number of domain names excludes '.gov.au'.

The contribution to the development of social capital from ICT usage flows from the extent to which it assists in creating greater interconnectedness between people and organisations and the value that this has for individuals and society. The contribution of ICT usage to building social capital can be demonstrated by looking at how it has facilitated interactivity in both the personal and commercial spheres.

Organisations are using ICTs and the online environment to structure their business models, leading to changes in the way they deliver services and communicate and engage with customers. For example, the internet allows businesses to operate without the need for a physical presence. It can also be used to support shopfront businesses by providing consumers with an information portal about the business and products—sometimes known as 'click and brick'. In both cases the internet makes the business more accessible to consumers.²⁰

The increasing business reliance on the internet is demonstrated by the increase in websites and domain name registrations. At June 2010, 61 per cent of SMEs connected to the internet owned a website—up from 56 per cent at June 2009. Further, at June 2010, there were 1.76 million domain names registered under '.au' (excluding '.gov.au')—up from 1.42 million at June 2009.²¹

The usage of ICTs in the commercial sphere has also had an impact on business systems and the value chain. For example, the airline industry not only allows consumers to purchase tickets online but also allows online check-in and seat allocation. Shifting the responsibility for some tasks in the value chain from the airline to the consumer has not only reduced costs but has also given the consumer more choice and control.²²

The importance consumers place on being able to purchase goods and services online is demonstrated by the increasing value of internet commerce. The ABS estimates that the value of goods and services sold online in Australia was around \$123 billion in 2008–09.²³ Australian research shows that items related to travel (including tickets and accommodation), print (magazines and books) and music were the most frequently identified online purchases. Thirty-six per cent of internet users in Australia aged 14 years and over purchased travel items including tickets and accommodation online, while 23 per cent and 19 per cent respectively purchased print related material (books, magazines and newspapers) and downloaded music.²⁴ In addition to shopping online, 19 per cent of internet users banked or paid their bills online.²⁵

A significant benefit of ICT usage comes from increased consumer empowerment. ICT usage gives consumers greater control by breaking down information asymmetry through improved access to product and pricing information. Product research and price comparisons are quicker, cheaper and easier to undertake on the internet. This enables consumers to optimise purchasing decisions through increased choice and knowledge, allowing for products to be better matched to their needs at a more competitive price.²⁶

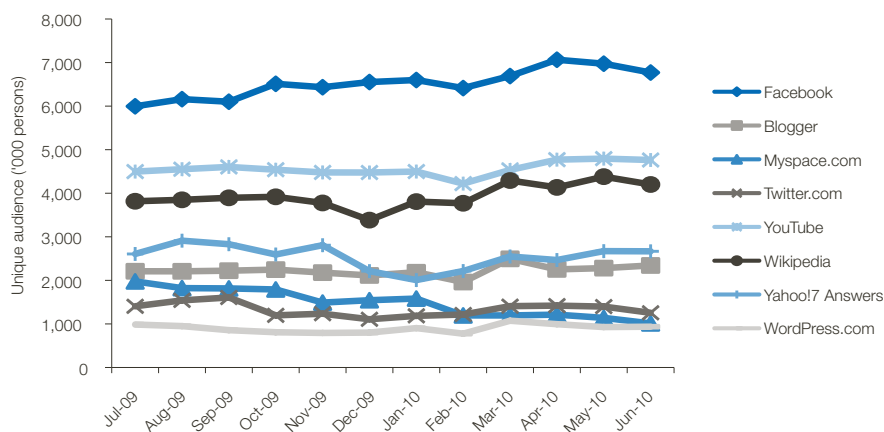
The internet has also empowered consumers by allowing them to become both producers and distributors of content. The development of user generated content has been facilitated by the use of social media, which in turn increases personal interactivity—a trend that is sometimes known as the ‘participative web’.

Social media facilitates collaborative activities such as the sharing of opinions, information, videos and photos. These activities are enabled through social networking sites like MySpace, Facebook, YouTube, Twitter and Wikipedia.

The use of social media has grown by five per cent over the 2009–10 reporting period and social networking/user generated content (UGC) activities are now seen as mainstream online activities in Australia.²⁷ This growth can be put down the fact that there is generally minimal or zero access costs and the participative ethos of social media encourages both new and experienced online users. At June 2010, an estimated 8.7 million Australians accessed the sites listed in Figure 5.6, compared to 8.3 million during July 2009. Facebook was the most popular, attracting 6.8 million visitors during July 2010.

The popularity of sites such as Facebook continues to be one of the factors driving Australians’ online participation levels, with growth evident in terms of site patronage and intensity of activity. This is reflected in the growing amount of time spent on these sites and content viewed. During June 2010 alone, home internet users in Australia spent 41.5 million hours accessing one or more of the sites identified above, viewing 4.5 billion separate web pages of content. This compared to 32.6 million hours spent accessing these sites, collectively viewing 3.4 billion web pages of content during July 2009. A more detailed examination of the growing patronage of social network/UGC sites can be found in the ACMA’s 2009–10 Communications report series, *Report 1—Australia in the digital economy: The shift to the online environment*.

Figure 5.6 Traffic to selected social networking/UGC sites, Australia



Note: Relates to users of a home broadband internet service.

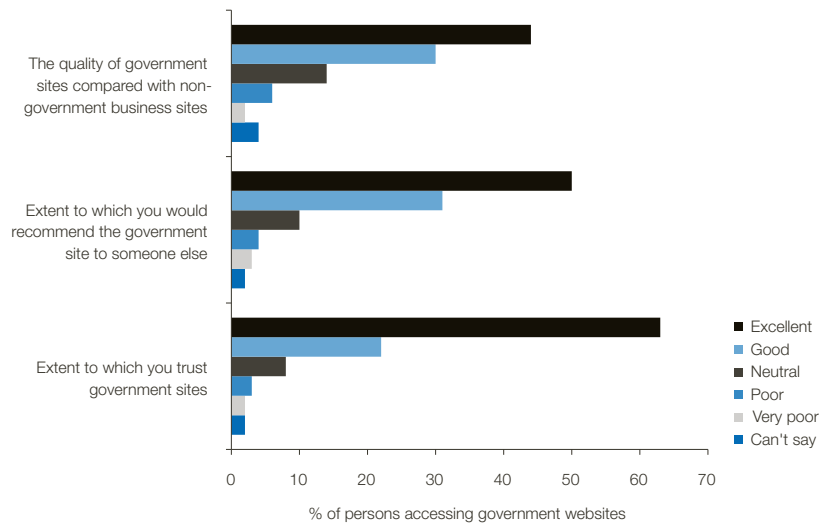
Source: Nielsen Online, June 2010.

Governments have also recognised the potential for ICT usage to engage and empower its citizens through e-government agendas, which seek to use ICTs to deliver government information and services. The trend towards accessing government services and information online recognises the potential for ICT usage to both empower and assist Australian citizens. Australians aged 64 years and younger are now more likely to use the internet to access government services. This group also has a strong preference for accessing government information online, rather than in person or over the phone.²⁸

Further, the attitudes of the public towards government websites and information are positive. Most people think government websites are trustworthy, with up-to-date information that is easy to access and understand. The most commonly accessed government websites include those related to community services, transport, business services and health. Figure 5.7 shows that citizen ratings for government websites accessed during the previous 12 months were very high, with the majority of respondents rating government sites highly in terms of trust and reliability (85 per cent).²⁹

For a broader overview of developments relating to Australia in the digital economy see the ACMA's 2009–10 Communication report series, *Report 1—Australia in the digital economy: The shift to the online environment*.

Figure 5.7 Citizen attitudes to government websites, Australia



Note: Relates to use of government websites over a 12 month period.
Source: The Australian Government Information Management Office. *Interacting with Government. Australians use and satisfaction with e-government services, December 2009.*

Endnotes

- 1 See Chapter 1, *The Australian communications and media industry*, for overview of changes in the use of fixed-line telephone, mobile and internet services.
- 2 Organisation for Economic Cooperation and Development, *The Well-being of Nations: The Role of Human and Social Capital*, 2001.
- 3 For example see: DBCDE, *The Role of ICT in building communities and social capital*, 2005. www.archive.dbcde.gov.au/2009/may/community_connectivity/the_role_of_ict_in_building_communities_and_social_capital_a_discussion_paper.
- 4 DBCDE, *The Role of ICTs in building communities and social capital*, January 2005.
- 5 The ACMA, *Australia in the digital economy: The shift to the online environment*, November 2010.
- 6 Roy Morgan Single Source, June 2010.
- 7 ABS, *8153.0-Internet Activity, Australia*, June 2010. Broadband defined as speeds equal to or greater than 256kbps.
- 8 Roy Morgan Single Source, June 2010.
- 9 The ACMA, *ACMA Communications report, 2009–10*.
- 10 Market Clarity Database, June 2010. Also includes resellers, ISPs.
- 11 ABS, *8153.0-Internet Activity, Australia*, June 2010.
- 12 Roy Morgan Single Source, June 2010.
- 13 Roy Morgan Single Source, June 2010.
- 14 Roy Morgan Single Source, June 2010.

- 15 Roy Morgan Single Source, June 2010.
- 16 Roy Morgan Single Source, June 2010.
- 17 The ACMA, *Australia in the digital economy: The shift to the online environment*, November 2010.
- 18 The ACMA, *Australia in the digital economy: The shift to the online environment*, November 2010.
- 19 ABS, *8153.0-Internet Activity, Australia*, June 2010.
- 20 The ACMA, *Australia in the digital economy: The shift to the online environment*, November 2010.
- 21 The Information Technology and Innovation Foundation, *The Internet Economy 25 Years After*, March 2010.
- 22 The ACMA, *Australia in the digital economy: The shift to the online environment*, November 2010.
- 23 ABS, *8166.0-Summary of IT Use and Innovation in Australian Business, 2008–09*.
- 24 Roy Morgan Single Source, June 2010.
- 25 Roy Morgan Single Source, June 2010.
- 26 The Information Technology and Innovation Foundation, *The Internet Economy 25 Years After .Com*. March 2010.
- 27 The ACMA, *Australia in the digital economy: The shift to the online environment*. November 2010.
- 28 Australian Government Information Management Office, *Interacting with Government. Australians use and satisfaction with e-government services*, December 2009.
- 29 Australian Government Information Management Office, *Interacting with Government. Australians use and satisfaction with e-government services*, December 2009.

Glossary

2G	second generation mobile telecommunications Mobile telecommunications services that use digital techniques, providing voice communications and a relatively low transmission rate for data.
3G	third generation mobile telecommunications A broadband mobile telecommunications platform supporting multimedia voice, video and data services. WCDMA and CDMA2000 are the 3G technologies derived from the GSM and CDMA 2G technologies respectively.
ABA	Australian Broadcasting Authority Former Commonwealth regulatory authority responsible for broadcaster licensing and content regulation of broadcast and narrowcast services under the <i>Broadcasting Services Act 1992</i> . Merged with Australian Communications Authority (ACA) to form the ACMA in 2005. Also see ACMA.
ABC	Australian Broadcasting Corporation Free-to-air national broadcaster of ABC radio and television channels, as well as online services. The ABC is funded by the Australian Government.
ABS	Australian Bureau of Statistics Commonwealth body responsible for collecting, analysing and publishing Australian demographic data.
ACA	Australian Communications Authority Former Commonwealth regulatory authority for telecommunications and radiocommunications. Merged with the Australian Broadcasting Authority in July 2005 to form the Australian Communications and Media Authority. Also see the ACMA.
ACCC	Australian Competition and Consumer Commission Commonwealth regulatory body with responsibilities derived from the <i>Trade Practices Act 1974</i> .
ACE	Australian Communication Exchange The current National Relay Service and text-based emergency call service provider.
the ACMA	The Australian Communications and Media Authority Commonwealth regulatory authority for broadcasting, online content, radiocommunications and telecommunications, with responsibilities under the <i>Broadcasting Services Act 1992</i> , the <i>Radiocommunications Act 1992</i> , the <i>Telecommunications Act 1997</i> and related acts. Established on 1 July 2005 following a merger of the Australian Communications Authority and the Australian Broadcasting Authority.
ADSL	asymmetric digital subscriber line A transmission method allowing high data rate communication over existing copper wires. The downstream data (data downloaded by user) transmission rate is much higher than the upstream data rate.
ADSL2	Higher data rate ADSL with greater reach from local telephone exchanges, dynamic data rate adaptation, better resistance to noise, diagnostics, a stand-by mode to save power and reduced initialisation time.
ADSL2+	Version of ADSL that uses double the bandwidth for downstream data transmission, effectively doubling maximum downstream data rates.
AFP	Australian Federal Police Australia's national police force. The ACMA works with the AFP on email spam and illegal internet content such as child pornography that is hosted outside Australia.
Australian Human Rights Commission	The Commonwealth agency with the responsibility for administering Australia's equal opportunity and anti-discrimination laws, including the <i>Disability Act 1992</i> . Formerly the Human Rights and Equal Opportunity Commission.
AISI	Australian Internet Security Initiative The AISI collects data on computers that are operating as zombies, analyses this data, and provides free daily reports to participating Australian Internet Service Providers (ISPs) on the zombie computers operating on their networks.

AM radio	amplitude modulation radio A method of radio broadcasting where the frequency is modulated or varied by its changing amplitude. AM radio signals travel large distances and have wide coverage areas. Radiofrequencies for AM broadcasts are expressed in kilohertz (kHz).
AMTA	Australian Mobile Telecommunications Association Association of mobile industry suppliers and manufacturers.
auDA	.au Domain Administration Organisation established to develop an effective self-regulatory regime for internet domain names in Australia.
bandwidth	In the internet industry, bandwidth refers to the capacity of a connection to carry information, while in radiocommunications, it is the amount of radiofrequency spectrum used for a particular function.
bit/s	bits per second Rate of transfer of data. See also Gbit/s, kbit/s, Mbit/s.
broadband	Describes a class of internet access technologies, such as ADSL, HFC cable and WiFi, offering a data rate significantly higher than narrowband services. These services are usually 'always-on' and do not tie up a telephone line exclusively for data. Broadband is a relative rather than absolute concept, 256 kbit/s widely regarded as the lower limit for broadband access.
BSB	Broadcasting Services Bands Parts of the radiofrequency spectrum dedicated to broadcasting services.
carrier	The holder of a telecommunications carrier licence in force under the <i>Telecommunications Act 1997</i> .
Communications Alliance	Industry organisation formed on 1 September 2006 from the merger of the Australian Communications Industry Forum (ACIF) and the Service Providers Association (SPAN).
coverage area	Geographic area in which calls are able to be made successfully. For instance, the area between a base station and a mobile phone handset.
CSG	Customer Service Guarantee Standard providing for financial compensation to customers where requirements set out in the standard are not met.
CSP	carriage service provider Person supplying or proposing to supply certain carriage services to a customer, including a commercial entity acquiring telecommunications capacity or services from a carrier for resale to a third party. Internet and pay TV service providers fall within the definition of carriage service providers under the <i>Telecommunications Act 1997</i> .
CTS	Children's Television Standards Standards designed to provide access for children (aged <14 years) to quality television programs made specifically for them. The standards regulate timing and scheduling of children's programs and content of adjacent programming.
datacasting	A service that delivers content in the form of text, data, speech, music or other sounds, visual images, or any other form or combinations of forms, where delivery uses the BSB.
data rate	Volume of data able to be transmitted over a given period of time. Data rates are usually measured in bits per second.
data traffic	Volume of data transferred in both directions between a customer and the customer's ISP. Data traffic is measured in bytes.
DBCDE	Department of Broadband, Communications and the Digital Economy Commonwealth department responsible for, among other things, communications policy.
DDA	Disability Discrimination Act 1992 Commonwealth legislation that makes discrimination on account of one's disability unlawful.
DEP	Disability Equipment Program A program for supplying people with disabilities with telecommunications equipment.
dial-up internet service	Service in which subscribers connect to the internet via a modem and dial-up software utilising the PSTN or an ISDN connection.
Do Not Call Register (DNCR)	Register established by the ACMA that allows individuals to register their home and mobile numbers to opt out of receiving most unsolicited telemarketing calls, with limited exemptions for public interest organisations.
DSL	digital subscriber line Transmission technique that dramatically increases the digital capacity of telephone lines into the home or office. Also ADSL, HDSL, xDSL.
DSLAM	digital subscriber line access multiplexer A device located in an exchange required to connect a subscriber to a DSL service.
EME	electromagnetic energy Energy in the form of waves having an electric and magnetic component.

ESA	Exchange Service Area The term used to describe a geographical area where all customers' fixed-line phone numbers are in the same number range or ranges and phone calls are charged at the same rates.
ESO	emergency service organisation Organisation providing an emergency service, being police, ambulance or fire service.
exchange	Network node where various numbers and types of communications lines are switched by the telecommunications network operator. Exchanges operate at local, long distance and international levels, and all subscribers are connected to their local exchange.
fixed-line telephone service	A term used to describe the delivery of voice services over the PSTN network. Does not typically refer to VoIP phone services.
FLRN	Freephone and local rate number Telephone numbers commencing with the digits 1800 (freephone) or 13 (local rate).
FM	frequency modulation radio A mode of radio broadcasting in which the frequency of the transmitted wave is modulated or varied with the amplitude or pitch of the signal. FM radio signals have good immunity to electrical interference and provide consistent quality reception during the day and night. The geographical coverage area varies, but for a high-power FM transmitter can be up to 100 kilometres. Radiofrequencies for FM broadcasts are expressed in megahertz (MHz).
Free TV Australia	Industry body responsible for developing and reviewing the Commercial Television Industry Code of Practice, representing all of Australia's commercial free-to-air television licensees.
FSA	field service area One of 44 broad geographic regions in Telstra's fixed telephone network.
GB	Gigabytes One billion bytes.
Gbit/s	Gigabits per second Data transfer rate of a billion bits per second. See bit/s.
geographic numbers	Numbers used to provide access to local telephone services and related voicemail services, facsimile services, internet dial-up services and termination numbers for freephone and local rate services. Also known as local numbers.
GHz	Gigahertz One billion Hertz, where one Hertz is the measurement of frequency equal to one cycle of electromagnetic radiation per second.
GSM	global system for mobile communications The widely used European digital cellular network standard.
HDTV	A digital television broadcasting system with higher resolution than traditional television systems.
HFC cable	hybrid fibre coaxial cable Network element consisting of optical fibre on main routes, supplemented by coaxial cable closer to a customer's premises.
HSDPA	high speed downlink packet access protocol A 3G (third generation) mobile telephony communications protocol in the High-Speed Packet Access (HSPA) family, which allows networks based on Universal Mobile Telecommunications System (UMTS) to have higher data transfer speeds and capacity.
ICANN	The Internet Corporation for Assigned Names and Numbers A not-for-profit corporation. Its responsibilities lie in coordinating the allocation and assignment of the sets of unique identifiers for the internet, namely, domain names within the Domain Name System (DNS), internet protocol (IP) addresses, autonomous system (AS) numbers, and protocol port and parameter numbers.
INHOPE	Internet Hotline Providers in Europe Association International forum for internet hotlines to exchange information and experience. Member hotlines deal with complaints regarding illegal internet content, particularly child pornography. The ACMA is an INHOPE member.
interception	The interception of telecommunications services for the purpose of law enforcement and national security.
IP	internet protocol The key member of the suite of internet protocols at the logical layer, specifying packet addressing and routing of data through the internet.
IPND	Integrated Public Number Database Database of information about customers of telecommunications services in Australia, for all carriers and carriage service providers (CSPs).
IPTV	internet protocol television Television system whereby digital content is delivered via a network infrastructure, often in conjunction with video-on-demand and other non-television services such as VoIP and other internet services.
ISP	internet service provider A CSP offering internet access to the public or another service provider.

KB	kilobyte(s) A thousand bytes. See byte(s).
kbit/s	kilobits per second Data transfer rate of 1,000 bits per second. See bit/s.
local numbers	See geographic numbers.
low-impact facilities	Communications facilities that are considered to have a low impact on their environment. They include underground cabling, small radiocommunications antennas and dishes, in-building subscriber connections and public payphones. The <i>Telecommunications Act 1997</i> provides carriers with immunity from state and territory planning laws for the installation of 'low-impact' facilities.
LSS	Line sharing service Involves an access provider providing a voiceband PSTN service to an end-user, whilst providing access to another carrier (the access seeker) to simultaneously provide services to the same end-user over the high frequency portion of the unconditioned local loop. Access seekers typically use the LSS together with their own network equipment to supply DSL services to end-users.
MB	Megabyte(s) One million bytes. See byte(s).
Mbit/s	Megabits per second Data transfer rate of one million bits per second. See bit/s.
MHz	Megahertz One million Hertz. See also GHz.
the Minister	Minister for Broadband, Communications and the Digital Economy Minister responsible for the ACMA and its governing legislation, and the legislation that the ACMA administers.
MMS	multimedia messaging service Mobile telecommunications data transmission service for sending messages with a combination of text, sound, image and video to MMS-capable handsets.
MNP	mobile number portability Portability for mobile phone numbers. See number portability.
MVNO	Mobile Virtual Network Operator A mobile service operator that does not have its own licensed spectrum and does not have the infrastructure to provide mobile service to its customers. Instead, MVNOs lease wireless capacity from pre-existing mobile service providers and establish their own brand names different from the providers.
National Classification Scheme	The National Classification Scheme is a cooperative arrangement between the Commonwealth, States and Territories, under which the Classification Board classifies films (including videos and DVDs), computer games and certain publications.
NCD	nominated carrier declaration Declaration made by the owner of a telecommunications network unit (facilities or infrastructure for delivery of telecommunications services) nominating a licensed carrier that will be responsible for the specified network unit.
NEDE	new eligible drama expenditure Expenditure on new Australian or New Zealand television drama programs to meet content requirements that support the local television industry.
non dial-up subscribers	Subscribers with permanent and 'always on' connections to the internet using various technologies, including ISDN connections that do not require the user to dial up, DSL, cable, wireless, satellite, dedicated data service and frame relay.
NRF	Network Reliability Framework Requirement on Telstra from January 2003 to provide regular reports to the ACMA on the reliability of its fixed-line services, and to remediate the network in areas with particularly poor performance.
NRS	National Relay Service Service that provides access to the standard telephone service for people with hearing or speech impairment through the relay of voice, modem or TTY communications. Operates as a translation service between voice and non-voice users of the standard telephone service. Currently provided by Australian Communication Exchange.
number portability	Arrangements allowing customers to transfer their telecommunications service from one service provider to another without changing their number. Number portability is available on the following services; local numbers, freephone and local rate number and mobile numbers.
open narrowcasting service	A free-to-air broadcasting service that has its reception limited by being targeted to a special interest group, by being intended for limited locations, by being provided during a limited period, or limited for some other reason.
pay TV	See subscription television service.
payphone	A public telephone where calls may be paid for with coins, phone cards, credit cards or reverse charge facilities.

P2P applications	peer-to-peer applications Application files not stored on a central server, but exchanged directly between users. Consumer grade VoIP is an example of a voice application that consumers download onto their own computers, bypassing carrier-based service delivery altogether.
portability	See number portability.
post-paid	A contract under which a user is charged on a periodic basis depending on service usage during the billing period.
premium rate services	Content services accessed on numbers with a 190 prefix, where the cost of the call, including access to the content, is included on the customer's telephone bill. Content includes sports results, weather forecasts, astrology services, competition entries, dating contact and telephone sex services. Premium rate services include SMS as well as voice, fax and data.
pre-paid	A contract system by which users pay an amount up-front to purchase a certain amount of usage or credit.
priority assistance	Service for people with a diagnosed life-threatening medical condition entitling them to faster connection and fault repair of their fixed-line telephone service.
PSTN	public switched telecommunications network Public telecommunications network operated by a carrier to provide services to the public.
RCMG	Register of Controlled Media Groups The register, maintained by the ACMA, lists the media groups in each licence area, the media operations that form part of a group, and the controllers of those operations.
SBS	Special Broadcasting Service Free-to-air national radio and television broadcasting service providing multilingual and multicultural programs that inform, educate and entertain all Australians and, in doing so, reflect Australia's multicultural society. The SBS Online service also provides additional multilingual content through the internet.
SIO	services in operation Refers to the number of services provided by a telephone company at a particular time. The term is used in the context of both fixed line services and mobile services.
smarnumbers®	Specified freephone (1800) or local rate (13, or 1300) numbers allocated by auction that are considered desirable because they can be translated to a phoneword or have a memorable pattern.
SMP	standard marketing plan Approved plan by the universal service provider of how it will meet the USO.
SMS	short message service Mobile telecommunications data transmission service that allows users to send short text messages to each other using the mobile handset keypad.
spam	Unsolicited commercial electronic messages that are sent by email, SMS, MMS and/or instant message.
SpamMATTERS	The ACMA's spam reporting and forensic analysis system. Users download a 'button' from the ACMA website to their email application that enables them to simultaneously delete spam from their computer and report it to the ACMA.
STS	standard telephone service The telecommunications service defined as a carriage service providing voice telephony or an equivalent service that meets the requirements of the TCPSS Act and the DDA.
Subscription Television	Service providing access, for a fee, to television channels transmitted using cable, satellite or terrestrial microwave.
Take-up	Adoption of a service or product by users.
Three-way control	An unacceptable three-way control situation exists in relation to the licence area of a commercial radio broadcasting licence (the <i>first radio licence area</i>) if a person is in a position to exercise control of a commercial television broadcasting licence, where more than 50 per cent of the licence area population of the first radio licence area is attributable to the licence area of the commercial television broadcasting licence; and a commercial radio broadcasting licence, where the licence area of the commercial radio broadcasting licence is, or is the same as, the first radio licence area; and a newspaper that is associated with the first radio licence area.
TIO	Telecommunications Industry Ombudsman scheme Industry-funded independent dispute resolution service established in December 1993, for consumers unable to resolve complaints with their telecommunications carrier or CSP (including ISPs).
trigger event	A trigger event relates to commercial regional radio licences and includes: a transfer of a licence; or formation of a new registrable media group which includes a regional commercial radio broadcasting licence; or change of controller of a registrable media group which includes a regional commercial radio broadcasting licence.
TTY	Teletypewriter Telephone typewriter which allows communication to be typed after the call is connected, enabling people with hearing or speech impairment to use voice telecommunications. Calls can be connected to another TTY user or relayed and translated by the NRS.

ULL	unconditioned local loop Use of unconditioned communications over copper wire pairs between the boundary of a telecommunications network at a customer's premises and a point of connection with a service provider usually other than the owner of the unconditioned network.
USO	universal service obligation Obligation under the <i>Telecommunications Act 1997</i> to ensure that standard telephone services, payphones and prescribed carriage services are reasonably accessible to all people in Australia on an equitable basis, wherever they reside or carry on business.
VDSL	very high bitrate digital subscriber line <i>VDSL</i> is a DSL technology providing faster data transmission over a single flat untwisted or twisted pair of copper wires. <i>VDSL</i> is capable of supporting high bandwidth applications.
VoIP	voice over internet protocol A protocol for transmitting voice over packet-switched data networks. Also called IP telephony.
WiFi	wireless fidelity <i>Used generically to refer to wireless local area network (IEEE 802.11) technology providing short-range, high data rate connections between mobile data devices and access points connected to a wired network.</i>
WiMAX	Worldwide Interoperability for Microwave Access Industry group organised to advance the IEEE 802.16 standards for broadband wireless access networks for multimedia applications with a wireless connection.

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